

Uniform Sanitary and Epidemiological and Hygienic Requirements for Goods Subject  
to Sanitary and Epidemiological Supervision (Control)

Chapter II

Part 22 Safety Requirements for Food Additives and Flavourings

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# Uniform Sanitary and Epidemiological and Hygienic Safety Requirements for Food Additives and Flavourings

(as amended by Decision of the Customs Union Commission  
No 889 of 9 December 2011)

## 1. Scope of Application

1. Sanitary and Epidemiological and Hygienic Safety Requirements for Food Additives and Flavourings (hereinafter referred to as “the Part of the Uniform Sanitary Requirements”) shall be applied to food additives and flavourings in the sphere of production, circulation and storage thereof, as well as to food products containing food additives and flavourings in the sphere of their application in food products manufacturing.

2. This Part of the Uniform Sanitary Requirements is developed based on the legislation of the Customs Union Member States, as well as the international documents in the field of food additives and flavourings safety.

## 2. Terms and Definitions

3. For the purposes of this document the following terms and definitions are used in this part of the Uniform Sanitary Requirements:

1) in relation to general terms:

1.1) "food flavouring (flavouring)" – products not consumed by humans directly as a food, containing flavouring substances (including natural) or flavouring preparations or thermal process flavourings or smoke flavourings or flavouring precursors or other flavourings (which contain other components, save the abovementioned) or their mixture (a flavouring component), designated for giving food products some flavour and/ or smell (except for sweet, sour and salty flavor), with addition of food additives and food raw material and without thereof;

1.2) "smoke flavourings" – mixtures of substances isolated from smokes applied in traditional smoking by means of fractionation process and smoke condensate purification;

1.3) "thermal process flavourings" – mixtures of substances obtained as a result of heating under certain conditions of edible and non-edible ingredients, one of which is an amino compound and another one is reducing sugar; heat-treatment conditions: temperature shall be not more than 180 °C, heat-treatment duration shall be 15 min at 180 °C with the corresponding duration increase when lower temperatures are applied – double heating duration in case of temperature decrease per each 10 °C, but no more than 12 hours, pH value during the process shall not exceed 8.0;

1.4) "safety of food additives, flavourings and food products containing thereof" – features and characteristics of food additives, flavourings and food products containing thereof, satisfying the technical regulations of this Part of Uniform Requirements and testifying to the absence of inadmissible risk in relation to

harm caused to human life or health and future generations, in case of human consumption thereof as part of food products;

1.5) "flavouring substance" – chemically identified (chemically individual) substance with characteristics of a flavouring, i.e. possessing a characteristic smell and/or flavour (save sweet, sour or salty);

1.6) "natural flavouring substance" – flavouring substance, isolated by means of physical, enzymatic or microbiological processes from raw material of plant or animal origin, including processed by traditional methods of food products production;

1.7) "complex food additive" – mixture of food additives (a food additive and raw material), manufactured as market products which may contain flavourings, food raw material, food products and other components; at least one of food additives, which is part of a complex food additive, shall function in the final food;

1.8) "maximum permissible level (maximum level, permissible level)" – a sanitary-hygienic standard, establishing maximum permissible quantity of a food additive (flavouring, biologically active substance) in a food product, ensuring its safety for humans;

1.9) "non-treated food products" – products not subjected to any treatment causing significant changes of its original state and content; such a product may be purified, prepackaged, packaged and frozen;

1.10) "new food additives, flavouring substances, natural sources of flavouring substances" - food additives, flavouring substances, natural sources of flavouring substances, not approved for application in food products production in compliance with the technical regulations of this Part of Uniform Requirements;

1.11) "food additive" - any substance (or mixture of substances), with no consideration of its caloric value, not usually consumed by humans directly as food and or a common food ingredient, meant to be included in food product when produced for technological purposes (function) for production, processing, preparation, treatment, packaging, transportation or storage thereof, which entails or might entail that such a substance or its transmutation products become food products components; food additives can perform several technological functions;

1.12) "flavouring precursor" – a product (which may be obtained from food products, as well as from products, not consumed directly as food), not necessarily possessing characteristics of a flavouring, meant to be added to a food product with the only purpose of obtaining flavour and smell by means of destruction or reaction with other components in the process of food production;

1.13) "flavouring preparation" – mixture of flavourings and other substances, isolated by means of physical, enzymatic or microbiological processes: from food products or food raw material, including after being treated by traditional methods of food products production; and/or from products of plant, animal or microbiological origin, not consumed directly as food, applied as such or treated by traditional methods of food products production;

1.14) "food products with reduced caloric value" – food products, the caloric value of which is reduced not less than by 30% in comparison with traditional food products;

1.15) "food products without added sugars" – food products manufactured without addition of mono- and disaccharides and food products containing thereof;

1.16) "traditional methods of food products production" - boiling, including steaming and under pressure (up to 120 °C), baking, roasting, stewing, frying, including with oil (up to 240 °C at atmospheric pressure), drying, steaming out, heating, chilling, freezing, steeping, maceration (soaking), infusion (brewing), percolation (screening), filtration, extrusion (extracting), mixing, emulsifying, particle size reduction (cutting, kibbling, grinding, milling), capsulation, peeling (husking), distillation (rectification), extraction (including solvent extraction), fermentation and microbiological processes;

2) in relation to terms of food additives functional groups:

2.1) "antioxidants" – food additives, designated for oxidation process deceleration and increasing of shelf life (term of storage) of food products (food raw material);

2.2) "anti-caking agents (anti-clumping agents)" – food additives, designated for prevention of sticking (caking) of powdery and fine-crystalline food products particles and ensuring their flowability;

2.3) "flour treatment agent" – a food additive (save emulsifiers), designated for baking performance or flour (dough) colour improvement;

2.4) "water-retaining agent (humectant)" – a food additive designated for water retaining and food products prevention from drying;

2.5) "glazing agent" – a food additive designated for coating food products surfaces with the purpose of glazing and/or protective layer formation;

2.6) "gelatinizing agent" – a food additive designated for formation of food product gel-like texture;

2.7) "thickener" – a food additive, designated for increasing food products viscosity;

2.8) "acid" – a food additive, designated for increasing food product acidity and/or giving it a sour flavour;

2.9) "preservative" – a food additive, designated for prolonging (increasing) food products shelf life (storage term) by means of protection thereof from microbic damage and/or pathogenic microorganisms growth;

2.10) "colouring agent" – a food additive, designated for food products colouring, colour intensification or restoration; food products having secondary colouring effect, as well as colouring agents applied for colouring of non-edible external parts of food products (for colouring of cheese and sausage covering, for meat, cheese and eggs marking) shall not be referred to as food colouring agents;

2.11) "filling agent" – a food additive which increases the food product volume without significant increase of energy value;

2.12) "carrier" – a food additive, designated for dissipation, dilution, dispersion or other physical modifications of food additives, flavourings, enzymatic preparations, nutrients and/or other substances, added with food (physiological) purposes without any changes or effect to their functions in order to increase their efficiency and simplification of application;

2.13) "anti-foaming agent" – a food additive, designated for prevention or reduction of foam formation in food products;

2.14) "foaming agent" – a food additive designated for even distribution of gaseous phase in liquid and firm food products;

2.15) "sweetener" – a food additive designated for food products sweetening or consumed as part of cooking sweetening agents;

2.16) "propellant" – a food additive-gas (save air), designated for pulling a food product out of a holding capacity (container);

2.17) "leavening agent" – a food additive, designated for increasing of dough volume by means of gas formation;

2.18) "acidity regulator" – a food additive, designated for pH (acidity, alkalinity) change or adjustment in food products;

2.19) "stabilizer" – a food additive designated for provision of aggregative stability and/or support of homogeneous dispersion of two or more non-miscible ingredients;

2.20) "packaging gas" – a food additive-gas (save air), inserted in the holding capacity (container) before, during and after placement of a food product in the holding capacity (container);

2.21) "firming agent" – a food additive, designated for preserving the density of fruit and vegetable tissues and firming of food products gel-like structure;

2.22) "flavour (smell) enhancer" – a food additive, designated for enhancing and/or modification of natural flavor and/or smell of food products;

2.23) "colour retention agent (stabilizer)" – a food additive designated for stabilization, preservation (or enhancing) of food products colouring;

2.24) "emulsifier" – a food additive, designated for formation and/or preservation of homogeneous mixture of two or more non-miscible phases in a food product;

2.25) "emulsifying salt" – a food additive, designated for even distribution of fats, proteins and/or improvement of spread cheese plasticity and products on basis thereof.

### **3. General Provisions**

4. This Part of the Uniform Requirements is intended for:

1) Individual entrepreneurs and legal entities engaged in business activity connected with manufacturing and circulation of food additives and flavourings as well as with manufacturing and circulation of food products containing food additives and flavourings.

2) State control (supervision) authorities of the Customs Union Member States performing functions involving control and supervision in the sphere of sanitary and epidemiological well-being of population, customers' rights and consumer market protection.

5. For the purposes of the safe use of food additives and flavourings in production of food products and prevention of the actions misinforming purchasers, the following requirements shall be observed:

1) Use of food additives and flavourings shall not raise the risk of possible harmful effect of food products on the human health;

2) Food products shall comply with the regulations established by these Uniform Requirements as to the permissible content of standard food additives and biologically active substances contained in flavourings (flavouring preparations) and/or in natural sources of flavouring substances;

3) Food additives shall be used exclusively in cases when there is a necessity for technological advancement, improvement of consumer properties of food products or extension of their storage life (shelf life) which may not be achieved otherwise or it would be economically inadvisable;

4) Use of food additives and flavourings shall not disorient consumers in regard to the consumer properties of food products. It is not allowed to add flavourings to food products for the purpose of enhancing their natural flavour (for instance, Whisky Flavouring in Whisky, Raspberry Flavouring in raspberry jam, Milk Flavouring in milk powder, etc.);

5) Use of food additives and flavourings shall neither impair the organoleptic properties of food products nor significantly affect their nutrition value (with the exception of some specialized and dietary products);

6) Food additives and flavourings shall be added to food products at a minimum necessary to achieve the planned technological effect;

7) It is not allowed to use food additives and flavourings in order to cover up spoilage and bad quality of raw materials or end food products and/or to adulterate them and/or to disorient the purchasers;

8) Food additives, flavourings and food products containing them that are imported in the Customs Union Member States shall comply with the provisions hereof;

9) Food additives and flavourings shall be prepacked and packaged so that to ensure their safety and consumer properties stated on the label during the storage life (shelf life) with observance of the storage conditions;

10) When packing food additives and flavourings, such materials shall be used that comply with the safety requirements regarding materials coming in contact with food products (Chapter II, Part 16);

11) Food additives and flavourings being in circulation in the territory of the Customs Union Member States shall be supported by the documents confirming their safety and ensuring their traceability, as well as information on the storage conditions and storage life (shelf life) of the products.

12) Food additives and flavourings being in circulation in the territory of the Customs Union member states that are produced with the use of genetically modified organisms and other biological technologies and/or nanotechnologies shall comply with the Uniform Requirements for Safety and Nutrition Value of Food Products (Chapter II, Part 1)

13) The manufacturer (seller) of food additives, flavourings and food products containing food additives and flavourings shall bear responsibility for their safety.

6. The normative and technical documents for food additives, flavourings and food products containing them (standards, technical requirements, regulations, technology guidelines, specifications, formulae, content data) shall contain the following information in respect to the ingredients with indication of:

- 1) For food additives – index E (if any);
- 2) For complex food additives – quantitative content of the constituent food additives, apart from those which are regulated according to the TD (Technical Documents), as well as categories of the constituent flavourings (flavouring substances, flavouring preparations, smoke flavourings, thermal process flavourings, etc.) and quantitative content of standard biologically active substances when using natural sources of flavouring substances containing such biologically active substances, information on the regulations on use (field of application, dosage);
- 3) For flavourings – ingredients, including flavouring substances and flavouring preparations with indication (for foreign manufacturers) of the international legislation allowing for their use in the food industry; quantitative content of the constituent food additives, apart from those which are regulated according to the TD; quantitative content of standard biologically active substances when using natural sources of flavouring substances containing such biologically active substances, information on the regulations on use (field of application, dosage);
- 4) For natural sources of flavouring raw materials and flavouring preparations produced out of them – Latin names, used parts (organs, fluids), quantitative content of standard biologically active substances when using natural sources of flavouring substances containing such biologically active substances, information on the regulations on use (field of application, dosage);
- 5) For food products containing food additives and flavourings – quantitative content of the constituent food additives, apart from those which are regulated according to the TD, as well as categories of the constituent flavourings (flavouring substances, flavouring preparations, smoke flavourings, thermal process flavourings, etc.) and quantitative content of standard biologically active substances when using natural sources of flavouring substances containing such biologically active substances;
- 6) Information on the content of complex food additives (content of standard food additives), ingredients of flavourings, percentage of standard biologically active substances which shall be submitted in the course of the state registration or state sanitary control (supervision);
- 7) Information on the use of genetically modified organisms, including genetically modified microorganisms, in food additives and flavourings;
- 8) Information on the use of nanomaterials and nanoparticles in food additives and flavourings;
- 9) Information on the use of allergenic substances in food additives and flavourings: peanuts and derived products; aspartame and aspartame-acesulfame salt; mustard and derived products; sulphur dioxide and sulphites (with the mass fraction of more than 10 mg/kg(l) in terms of sulphur dioxide); cereals containing gluten and derived products; sesame and derived products; shellfish and derived products; milk and derived products (including lactose); nuts and derived products; crustacean and derived products; fish and derived products; celery and derived products; soybean and derived products; eggs and derived products.

7. New food additives and flavourings (not regulated by this Part of the Uniform Requirements) shall be allowed to be used in the manner established by the

Customs Union Member States. In addition to normative and technical documents the following information shall be presented to evidence the human health safety of food additives, flavouring substances, natural sources of flavouring substances or flavouring preparations produced from of them:

1) For food additives and flavouring substances — characteristics of the substance: its origin and chemical formula (composition), physicochemical properties, method of preparation, principal substance percentage, presence and percentage of semi-finished products, admixtures, purity degree, method of achievement of the desirable technological effect, possible interaction products with nutrient materials;

2) For natural sources of flavouring substances and flavouring preparations produced from of them – the part (parts) being used, composition and percentage of the principal components, including biologically active substances, use for the nutritive and medical purposes, dosage;

3) Toxicological characteristics; for particular substances — metabolism in the animal body;

4) Technological justification of use of new products, their advantages over the currently used products, list of the food products in which these new products are proposed to be used, dosage necessary to achieve the technological effect;

5) Technical documentation containing the established safety standards, methods of evaluation of a new food additive (its transmutation products) or principal components and biologically active substances (if any).

#### **4. Safety Requirements for Food Additives, Flavourings and Food Products Manufactured with the Use of Food Additives and Flavourings**

8. In terms of safety indicators food additives and complex food additives containing only food additives shall comply with the requirements of the legislation of the Customs Union Member States.

Safety indicators of complex food additives containing food raw materials and food products shall comply with the requirements established for food products of a mixed (multicomponent) composition in the Uniform Requirements for Safety and Nutrition Value of Food Products (Chapter II, Part 1).

9. In terms of safety indicators flavourings shall comply with the requirements in accordance with Annexes No. 1 and No. 19 hereof. Natural sources of flavouring substances applied in the manufacturing of flavourings shall be used in accordance with the legislation of Customs Union Member States.

10. In terms of safety indicators food products containing food additives and flavourings shall comply with the requirements of this Part of the Uniform Requirements (Annexes No 2—No. 18 and No. 20) and with the Uniform Requirements for Safety and Nutrition Value of Food Products (Chapter II, Part 1).

11. Food additives shall be used in the industrial production of food products. It is allowed to produce (import), keep in circulation and use in the production of food products the food additives indicated in Annex No. 2 and complying herewith in terms of safety indicators.

12. Only the following food additives shall be allowed for retail sale:



1) Acids and acidity regulators: sodium hydrogen carbonate (E500ii, baking soda), citric acid (E330), carbon dioxide (E290);

2) Colouring agents, including those for Easter eggs: azorubine (E122), anthocyanins (E163), sunset yellow FCF (E110), quinoline yellow (E104), green S (E142), indigotine (E132), carmine (E120), carotene and its derivatives (E160a), ponceau 4R (E124), brilliant blue FCF (E133), patent blue V (E131), tartrazine (E102);

3) Sweeteners: aspartame (E951), acesulfame potassium (E950), aspartame-acesulfame salt (E962), isomaltitol (E953), xylitol (E967), lactitol (E966), maltitol (E965), mannitol (E421), neohesperidin dihydrochalcone (E959), saccharin and its sodium, potassium, calcium salts (E950), sorbitol (E420), stevia and stevioside (E960), sucralose (E955), thaumatin (E957), cyclamic acid and its sodium, calcium salts (E952), erythritol (E968);

Retail sale of other food additives (preservatives: benzoic acid (E210), sodium benzoate (E211), potassium benzoate (E212), calcium benzoate (E213), sorbic acid (E200), sodium sorbate (E201), potassium sorbate (E202), calcium sorbate (E203), 9% (no more) acetic acid aqueous solution (E260); flavour and smell enhancers: glutamic acid (E620), sodium glutamate (E621), potassium glutamate (E622), calcium glutamate (E629), guanylic acid (E626), sodium guanylate (E627), potassium guanylate (E628), calcium guanylate (E629), inosinic acid (E630), sodium inosinate (E631), potassium inosinate (E632), calcium inosinate (E633), calcium 5'-ribonucleotides (E634) and sodium 5'-ribonucleotides (E635) shall be regulated in accordance with the legislation of the Customs Union Member States.

13. The content of any food additives derived from all the sources, including with flavourings, raw materials, semi-manufactured products (re-entry), in food products shall comply with the requirements established for the end product and shall not exceed the maximum permissible levels set by this Part of the Uniform Requirements.

14. The content of food additives in food products shall be controlled hereby and in accordance with the sequence (formulae) and/or with the use of analytic methods of research.

The content of the following food additives shall be controlled with the use of analytic methods of research (if there are any methods of control approved in a prescribed manner in the Customs Union Member States):

1) Antioxidants: butylhydroxyanisole, butylhydroxytoluene, tert-butylhydroquinone, propyl, octyl and dodecyl esters of gallic acid;

2) Preservatives: benzoic acid and its benzoates, dehydroacetic acid and its sodium salt, diphenyl, nitrates and nitrites, parabens- methyl and ethyl esters of p-hydroxybenzoic acid and their sodium salts, sulphurous acid and sulphites, hydrosulphites and pyrosulphites, sorbic acid and its sorbates;

3) Colouring agents: azorubine, quinoline yellow, sunset yellow FCF, fast green FCF, green S, indigotine, brown HT, allura red AC, ponceau 4R, brilliant blue FCF, patent blue V, tartrazine, brilliant black PN, annato (bixin, norbixin), carmines, curcumin, lutein, lycopene;

4) Carriers: propylene glycol, benzyl alcohol, triacetin, diacetin, tri-ethyl citrate;

5) Sweeteners: aspartame, acesulfame, aspartame-acesulfame salt, neohesperidin dihydrochalcone, saccharin and its salts (sodium, potassium, calcium), sucralose, thaumatin, cyclamic acid and its cyclamates;

6) Flavour (smell) enhancers: glutamic acid and its glutamates, guanylic acid and its guanylates, inosinic acid and its inosinates, 5'-ribonucleotides;

7) Phosphoric acid and its phosphates, diphosphates, triphosphates and polyphosphates in terms of  $P_2O_5$ ;

8) Food additives not allowed to be used in the food industry: colouring agents - amaranth, erythrosin, red 2G, yellow 2G, citrus red 2; preservatives — para hydroxybenzoic acid propyl ester and its sodium salt and hexamethylenetetramine and flour treatment agents – potassium and calcium bromates; non-edible substances — sudans 1-4, para-red;

15. The use of food additives while producing food products shall be subject to numeric standard (maximum permissible level) or fixed by the manufacturer in accordance with technical necessity – “according to TD” (“according to the technical documents” — regulations established by the manufacturer and related to the use of food additives and flavourings in the cases when permissible levels and/or types of food products are determined by the technological expediency, and quantities of added food additives and flavourings shall not exceed the amounts necessary to achieve the required technological effect).

16. The requirements to content of food additives in food products both controlled and regulated “according to TD”, are established in Annexes No.3—No.17 of this Part of the Uniform Requirements under the following functional groups:

- 1) Anti-caking agents (anti-clumping agents) — in Annex No. 3;
- 2) Antioxidants — in Annex No. 4;
- 3) Flour treatment agents — in Annex No. 5;
- 4) Glazing agent— in Annex No. 6;
- 5) Acids and acidity regulators — in Annex No. 7;
- 6) Preservatives — in Annex No. 8;
- 7) Colouring agents — in Annexes No. 9, No. 10 and No. 11;
- 8) Carriers — in Annex No. 12;
- 9) Sweeteners — in Annex No. 13;
- 10) Propellants and packaging gases — in Annex No. 14;
- 11) Stabilizers, emulsifiers, filling and thickening agents — in Annex No. 15;
- 12) Flavour and smell enhancers — in Annex No. 16;
- 13) Fixing agents and colour stabilizers — in Annex No. 17.

Regulations for the use of food additives while producing baby food products are specified in Annexes No. 21, No. 22, No. 23 and No. 24.

17. This Part of the Uniform Requirements establishes the following restrictions and peculiarities of using food additives while producing certain types of food products:

1) Food additives (apart from colouring agents and sweeteners) using of which is regulated “according to TD” under Annexes No. 3—No. 6 and No. 7 (apart from

dioxide, E290), No. 8, No. 12, No. 15, No. 16 and No. 17 hereof shall be allowed to be used for all types of food products except for:

a) Crude food products, honey, wine, fats of animal origin, butter from cow's milk, pasteurized and sterilized milk and cream, natural mineral waters, coffee (except for instant aromatized coffee) and coffee extracts, non-aromatized leafy tea, sugars, dry pasta products (apart from gluten-free and low protein ones), natural, non-aromatized buttermilk (except for the sterilized one);

b) Food products in accordance with Annex No. 18 hereof, for which the list of food additives used "according to TD" and permissible levels of their using are established;

2) Colouring agents may be used: to preserve original exterior view of a food product, the colour of which changes as a result of treatment, storage, packing etc., to colour colourless food products and to change their organoleptic properties; maximum levels of colouring agents content in food products established in Annexes No. 10 and No. 11 mean the content of the main colouring substance of used commercial preparations of colouring agents;

3) It is not allowed to use colouring agents while producing food products established in Annex No. 9; colouring agents the use of which is regulated "according to TD" are allowed to be used for all types of food products except for those established in Annexes No. 9 and No. 10 hereof;

4) Food products are allowed to be coloured by water-insoluble varnishes, where maximum levels of colouring agents content shall correspond to the levels of soluble forms of colouring agents established in Annexes No. 10 and No. 11 hereof;

5) The following colouring agents are allowed to mark meat, eggs and cheeses: methyl violet (according to the international classification of colouring agents — C.I. 42535), rhodamine C (C.I. 45170), acid fuchsine (C.I. 45685), as well as food colouring agents in accordance with Annex No. 11; only the food colouring agents specified in Annex No. 11 hereof are allowed to colour eggs;

6) Flour treatment agents are not allowed to be used while producing flour for retail sale (apart from special types: pancake flour, muffin flour, etc.);

7) Preservatives are not allowed to be used while producing milk, butter, flour, bread (except for the one packed for long-terms storage), meat used as raw material to produce food products;

8) Content of sulphur dioxide in food products in the amount of less than 10 mg/kg, l (in case of using desulphurized raw materials or due to re-entry) is evaluated as residual quantities having no preserving effect;

9) Nitrites while producing meat products shall be used only in the form of salt-nitrite mixtures (solutions) or as part of complex food additives;

10) Sweeteners shall be used: in food products with reduced energy value and without added sugars, in dietary products intended for the people who are recommended to reduce (exclude) their consumption of sugar, in specialized products of specified chemical composition, as well as to substitute for the sugar in order to increase the storage life of food products.

18. It is allowed to produce and import the following substances in the territory of Customs Union Member States as flavouring raw materials used in production of flavourings:

1) Flavouring substances in accordance with Annex No. 19 of this Part of the Uniform Requirements;

2) Natural sources of flavouring substances and/or flavouring preparations manufactured thereof in accordance with the legislation of Customs Union Member States.

19. It is allowed to produce and import in the territory of Customs Union Member States any food flavourings:

1) Consisting of flavouring substances in accordance with Annex No. 19 of this Part of the Uniform Requirements;

2) Consisting of flavouring preparations produced from natural sources of flavouring substances in accordance with the legislation of Customs Union Member States.

3) Smoke flavourings;

4) Thermal process flavourings;

5) Consisting of flavouring precursors;

6) Other flavourings (containing components other than those listed above in Sub-clauses 1), 2), 3), 4) and 5) of this Clause;

7) Mixtures of the above mentioned flavourings.

20. Field of application and maximum dosage of flavourings shall be established by their manufacturer in technical documents in accordance with the regulations specified by this Part of the Uniform Requirements, considering permissible content of food additives and biologically active substances in food products; dosage of flavourings while producing food products shall not exceed the amounts fixed by the manufacturer of the flavourings.

21. It is allowed to produce and import in the territory of Customs Union Member States any food products containing flavourings and (or) flavouring substances and (or) natural sources of flavouring substances (flavouring preparations manufactured thereof) which comply with this Part of the Uniform Requirements.

It is allowed to produce and import in the territory of Customs Union Member States any food products containing flavourings and (or) flavouring substances and (or) natural sources of flavouring substances of plant and animal origin (flavouring preparations manufactured thereof) which comply with this Part of the Uniform Requirements.

22. Permissible levels of content in food products of potentially hazardous biologically active substances contained in flavourings manufactured of plant raw materials (in flavouring preparations) and/or in plant raw materials are established in Annex No. 20 of this Part of the Uniform Requirements.

23. When using medical plants and/or flavouring preparations produced of medical plants as natural sources of flavouring substances their content (in terms of dry raw materials or biologically active substance contained in them) in 1 kg (l) of a food product shall not exceed the quantity having a drug induced effect or (for biologically active substances) the upper permissible level of consumption

established by the Uniform Requirements for Safety of Food Products (Chapter II, Part 1).

24. The compounds shall not be allowed to be used in production of food products as flavouring substances are as follows: agaric acid, beta-asarone, aloin, hypericin, capsaicin, quassin, coumarin, menthofuran, methyl eugenol (4-allyl-1,2-dimethoxybenzole), pulegone, safrole (1-allyl-3,4-methylenedioxybenzole), hydrogen cyanide, thujone (alpha and beta), teucrin A, estragole (1-allyl-4-methoxybenzole).

25. Flavourings which do not contain the following biologically active substances specified in Annex No. 20 hereof shall be allowed for retail sale: beta-asarone, quassin, coumarin, menthofuran, methyl eugenol (4-allyl-1,2-dimethoxybenzole), pulegone, safrole (1-allyl-3,4-methylenedioxybenzole), hydrogen cyanide, thujone (alpha and beta), teucrin A, estragole (1-allyl-4-methoxybenzole).

### **5. Requirements for Labelling of Food Additives, Flavourings and Food Products Containing Food Additives and Flavourings**

26. Manufacturer shall be obliged to provide the purchaser with required and credible information on products.

27. Labelling of food additives and flavourings used as raw material in production of food products shall include:

1) Name of product:  
a) the name shall include the words "food additive (complex food additive)" or "flavouring (flavouring substance, flavouring preparation, smoke flavouring, thermal process flavouring, flavouring precursor)" and a concrete name or description»

b) index E (if any) shall be additionally specified for food additives, for complex food additives shall also be specified the list of ingredients in decreasing order;

c) with observance of these Uniform Requirements for flavourings additionally may be specified the words "natural flavouring";

2) specification "not for retail sale".

3) name and location of the manufacturer and (or) the seller.

4) net mass (or volume) of the product;

5) manufacture date and (or) packing date;

6) terms and conditions of storage (storage life);

7) batch number or mark identifying the batch of the products.

Information given in Sub-clauses 1)-b, 4), 5), 6) may be given in the technical (supporting) documentation

28. Labelling of food products and flavourings designed for selling to consumers (for retail sale), and also food products containing food additives, shall be made in accordance with Uniform Requirements which establish requirements for food products labelling (Chapter II, Part 10) and in accordance with the following additional requirements:

1) for food additives and food products containing food additives shall be given its technological function and index E (if any) or the name of the food

additive in accordance with Annex No. 2 hereof; for table sweeteners shall be given the name of the constituent food additives - sweeteners;

2) for food products and flavourings shall be given the recommendations for application and accident preventives (if necessary); for table sweeteners shall be given their conditions of the safe use, including dosage (norm) of daily intake;

3) for food additives - table sweeteners containing sugar alcohols (isomaltitol (E953), xylitol (E967), lactitol (E966), maltitol (E965), mannitol (E421), sorbitol (E420), erythritol (E968) and for food products containing sweeteners-sugar alcohols shall be placed a warning information; "If overused may provoke laxative action";

4) for food additives - table sweeteners containing aspartame and aspartame-acesulfame salt and food products containing the said sweeteners shall be placed a warning information: "Contains the source of phenylalanine";

5) for food products, containing colouring agents: azorubine E122, quinoline yellow E104, sunset yellow FCF E110, allura red AC E129, ponceau 4R E124 and tartrazine E102 shall be placed a warning information: "the words "colouring agent(s)" and the name of colouring agent(s) or the words "colouring agent(s)" and index(es) E may affect children energy and concentration"; the exceptions are alcohol drinks (ethanol content more than 1,2 % by volume) and food products in which the specified colouring agents are used for labelling of meat products or for labelling or decorative colouring of eggs (Easter eggs):

6) for multicomponent food products shall be given food additives - constituents of different components (food ingredients), in case such food additives produce a functional effect in the final food product or if such products refer to baby food and dietary products;

7) for food products containing flavouring preparations it is required either to specify its particular type (extract, tincture, essential oil, oleoresins etc.) or "natural flavouring";

8) it is allowed not to specify on the label flavouring preparations extracted in the process of preparing of concentrated products when using them for production of restored food products;

9) it is allowed not to specify on the label the preservative sulphur dioxide subject to its content in food products in the amount of less than 10 mg/kg (l).

29. When using the term "natural" for description (in the name) of flavourings the following requirements shall be observed;

1) the term "natural" may be used only if the flavouring includes only flavouring preparations and/or natural flavouring substances;

2) the term "natural flavouring substances" may be used only for flavourings which contain only natural flavouring substances;

3) the term "natural flavouring" in combination with the name of a food product, the category of a food product or a source of plant or animal origin may be used only if the flavouring component was prepared entirely from the said source (for example, "natural flavouring of apple (Apple)", "natural flavouring of fruits (Fruit)", "natural flavouring of mint (Mint)");

4) the term "natural flavouring" may be used if the flavouring component of the flavouring was prepared of natural source materials (natural flavouring substances and flavouring preparations) reference to those does not reflect their flavour and smell (on the food product label shall be specified "natural flavouring" and a fancy name).

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## SAFETY REQUIREMENTS FOR FLAVOURINGS

1. Content of toxic elements in flavourings shall not exceed the following values:  
lead- 5,0 mg/kg; cadmium- 1,0 mg/kg; arsenic- 3,0 mg/kg; mercury- 1,0 mg/kg;
2. Smoke flavourings shall meet the following additional requirements:
  - 1) content of benz(a)pyrene shall not exceed 2 mcg/kg (1);
  - 2) content of benz(a)anthracene shall not exceed 20 mcg/kg (1)<sup>1</sup>;
  - 3) fraction of smoke flavourings in the content of benz(a)pyrene in food products shall not exceed 2 mcg/kg (1);
3. In terms of microbiological indicators flavourings shall meet the following requirements:

Types of Flavourings	QMAFAn M CFU/g, not more than	Mass of product, in which the Indicator is not Allowed, g		Moulds, CFU/g not more than	Yeast, CFU/g not more than	Notes
		Colifor m bacteria - coliform s	Pathogenic bacteria, including Salmonella			
Liquid and paste-like water-based flavourings <sup>1</sup>	$5 \times 10^2$	1.0	25	100		moulds and yeast, in total
Dry flavourings based on sugars, gums, salts and other products	$5 \times 10^3$	0.1	25	100	100	
Dry flavourings based on starch and spices	$5 \times 10^5$	0.01	25	500	100	for spices - sulphite- reducing clostridia are not allowed in 0,01 g
Note: <sup>1</sup> - except for aqueous solutions with ethanol or propylene glycol content of more than 15%.						

<sup>1</sup> Laboratory control shall be performed in case of availability of a method approved in the established manner in the Customs Union Member States



**LIST OF FOOD ADDITIVES ALLOWED FOR USE IN PRODUCTION OF FOOD PRODUCTS**

Index	Name of Additives	Technological Functions
E100	Curcumin (CURCUMIN)	colouring agent
E101	Riboflavins (RIBOFLAVINS): (i) Riboflavin (Riboflavin), (ii) Sodium salt riboflavin 5-phosphate (Riboflavin 5-phosphate sodium).	colouring agent
E102	Tartrazine (TARTRAZINE)	colouring agent
E104	Quinoline yellow (QUINOLINE YELLOW)	colouring agent
E110	Sunset yellow FCF (SUNSET YELLOW FCF)	colouring agent
E120	Carmines (CARMINES)	colouring agent
E122	Azorubine, carmoisine (AZORUBINE)	colouring agent
E124	Ponceau 4R, Brilliant Scarlet 4R (PONCEAU 4R)	colouring agent
E129	Allura red AC (ALLURA RED AC)	colouring agent
E131	Patent blue V (PATENT BLUE V)	colouring agent
E132	Indigotine (INDIGOTINE)	colouring agent
E133	Brilliant Blue FCF (BRILLIANT BLUE FCF)	colouring agent
E140	Chlorophylls and chlorophyllins (CHLOROPHYLLS AND CHLOROPHYLLINS) (i) Chlorophylls (Chlorophylls) (ii) Chlorophyllins (Chlorophyllins)	colouring agent
E141	Copper complexes of chlorophylls and chlorophyllins (COPPER COMPLEXES OF CHLOROPHYLLS AND CHLOROPHYLLINS): (i) Copper complexes of chlorophylls (Copper complexes of chlorophylls), (ii) Copper complexes of chlorophyllins (Copper complexes of chlorophyllins).	colouring agent
E142	Green S (GREEN S)	colouring agent
E143	Fast green FCF (FAST GREEN FCF)	colouring agent
E150a	Caramel I - Plain (CARAMEL I - Plain)	colouring agent
E150b	Caramel II - Caustic sulphite process (CARAMEL II - Caustic sulphite process)	colouring agent
E150c	Caramel III - Ammonia process (CARAMEL III - Ammonia process)	colouring agent
E150d	Caramel IV - Ammonia-sulphite process (CARAMEL IV - Ammonia-sulphite process)	colouring agent

E151	Black PN, Brilliant black PN (BRILLIANT BLACK PN)	colouring agent
E153	Vegetable carbon (VEGETABLE CARBON)	colouring agent
E155	Brown HT (BROWN HT)	colouring agent
E160a	Carotenes (CAROTENES)	colouring agent
E160b	Annato, bixin, norbixin (ANNATO, BIXIN, NORBIXIN)	colouring agent
E160c	Paprika extract, capsanthin, capsorubin (PAPRIKA EXTRACT, CAPSANTHIN, CAPSORUBIN)	colouring agent
E160d	Lycopene (LYCOPENE)	colouring agent
E160e	beta-apo-8'-carotenal (C30) (BETA-APO-8'-CAROTENAL (C30))	colouring agent
E160f	Beta-apo-8'-carotenoic acid (C30) of ethyl ester (BETA-APO-8'-CAROTENOIC ACID (C30) OF ETHYL ESTER)	colouring agent
E161b	Lutein (LUTEIN)	colouring agent
E161g	Canthaxanthin (CANTHAXANTHIN)	colouring agent
E162	Beet red (BEET RED)	colouring agent
E163	Anthocyanins (ANTHOCYANINS)	colouring agent
E170	Calcium carbonate (CALCIUM CARBONATE)	colouring agent (surface), anti-caking agent, stabilizer, carrier
E171	Titanium dioxide (TITANIUM DIOXIDE)	colouring agent
E172	Iron oxides and hydroxides (IRON OXIDES AND HYDROXIDES)	colouring agents
E174	Silver (SILVER)	colouring agent
E175	Gold (GOLD)	colouring agent
E181	Tannins, food grade (TANNINS, FOOD GRADE)	colouring agent, emulsifier, stabilizer
E200	Sorbic acid (SORBIC ACID)	preservative
E201	Sodium sorbate (SODIUM SORBATE)	preservative
E202	Potassium sorbate (POTASSIUM SORBATE)	preservative
E203	Calcium sorbate (CALCIUM SORBATE)	preservative
E210	Benzoic acid (BENZOIC ACID)	preservative
E211	Sodium benzoate (SODIUM BENZOATE)	preservative
E212	Potassium benzoate (POTASSIUM BENZOATE)	preservative
E213	Calcium benzoate (CALCIUM BENZOATE)	preservative
E214	Ethyl ester p-hydroxybenzoate (ETHYL p-HYDROXYBENZOATE)	preservative
E215	Sodium ethyl ester p-hydroxybenzoate (SODIUM ETHYL p-HYDROXYBENZOATE)	preservative
E218	Methyl ester p-hydroxybenzoate (METHYL p-HYDROXYBENZOATE)	preservative

E219	Sodium methyl ester p-hydroxybenzoate (SODIUM METHYL p- HYDROXYBENZOATE)	preservative
E220	Sulphur dioxide (SULPHUR DIOXIDE)	preservative, antioxidant
E221	Sodium sulphite (SODIUM SULPHITE)	preservative, antioxidant
E222	Sodium hydrogen sulphite (SODIUM HYDROGEN SULPHITE)	preservative, antioxidant
E223	Sodium metabisulphite (SODIUM METABISULPHITE)	preservative, antioxidant
E224	Potassium metabisulphite (POTASSIUM METABISULPHIT)	preservative, antioxidant
E225	Potassium sulphite (POTASSIUM SULPHITE)	preservative, antioxidant
E226	Calcium sulphite (CALCIUM SULPHITE)	preservative, antioxidant
E227	Calcium hydrogen sulphite (CALCIUM HYDROGEN SULPHITE)	preservative, antioxidant
E228	Potassium hydrogen (bisulphite) (POTASSIUM HYDROGEN SULPHITE (BISULPHITE))	preservative, antioxidant
E230	Diphenyl (DIPHENYL)	preservative
E231	orto-phenylphenol (ORTO-PHENYLPHENOL)	preservative
E232	Sodium o-phenylphenol (SODIUM O-PHENYLPHENOL)	preservative
E234	Nisin (NISIN)	preservative
E235	Pimaricin, Natamycin (PIMARICIN, NATAMYCIN)	preservative
E236	Formic acid (FORMIC ACID)	preservative
E242	Dimethyl dicarbonate (DIMETHYL DICARBONATE)	preservative
E249	Potassium nitrite (POTASSIUM NITRITE)	preservative, colour retention agent
E250	Sodium nitrite (SODIUM NITRITE)	preservative, colour retention agent
E251	Sodium nitrate (SODIUM NITRATE)	preservative, colour retention agent
E252	Potassium nitrate (POTASSIUM NITRATE)	preservative, colour retention agent
E260	Acetic acid glacial (ACETIC ACID GLACIAL)	preservative, acidity regulator
E261	Potassium acetates (POTASSIUM ACETATES): (i) Potassium acetate (POTASSIUM ACETATE), (ii) Potassium diacetate (Potassium diacetate)	preservative, acidity regulator

E262	Sodium acetates (SODIUM ACETATES): (i) Sodium acetate (Sodium acetate), (ii) Sodium diacetate (Sodium diacetate).	preservative, acidity regulator
E263	Calcium acetates (CALCIUM ACETATES)	preservative, stabilizer, acidity regulator, carrier
E264	Ammonium acetate (AMMONIUM ACETATE)	acidity regulator
E265	Dehydroacetic acid (DEHYDROACETIC ACID)	preservative
E266	Sodium dehydroacetate (SODIUM DEHYDROACETATE)	preservative
E270	Lactic acid, L-, D and DL- (LACTIC ACID, L-, D- and DL-)	acidity regulator
E280	Propionic acid (PROPIONIC ACID)	preservative
E281	Sodium propionate (SODIUM PROPIONATE)	preservative
E282	Calcium propionate (CALCIUM PROPIONATE)	preservative
E283	Potassium propionate (POTASSIUM PROPIONATE)	preservative
E290	Carbon dioxide (CARBON DIOXIDE)	acidity regulator, propellant, packaging gas
E296	Malic acid, DL- (MALIC ACID, DL-)	acidity regulator
E297	Fumaric acid (FUMARIC ACID)	acidity regulator
E300	Ascorbic acid, L- (ASCORBIC ACID, L-)	antioxidant
E301	Sodium ascorbate (SODIUM ASCORBATE)	antioxidant
E302	Calcium ascorbate (CALCIUM ASCORBATE)	antioxidant
E303	Potassium ascorbate (POTASSIUM ASCORBATE)	antioxidant
E304	(i) Ascorbyl palmitate (ASCORBYL PALMITATE) (ii) Ascorbyl stearate (ASCORBYL STEARATE)	antioxidant
E306	Mixed tocopherols concentrate (MIXED TOCOPHEROLS CONCENTRATE)	antioxidant
E307	alpha-Tocopherol (ALPHA-TOCOPHEROL)	antioxidant
E308	synthetic gamma-Tocopherol (SYNTHETIC GAMMA-TOCOPHEROL)	antioxidant
E309	synthetic delta-Tocopherol (SYNTHETIC DELTA-TOCOPHEROL)	antioxidant
E310	Propyl gallate (PROPYL GALLATE)	antioxidant
E311	Octyl gallate (OCTYL GALLATE)	antioxidant
E312	Dodecyl gallate (DODECYL GALLATE)	antioxidant
E314	Guaiac resin (GUAIAIC RESIN)	antioxidant
E315	Isoascorbic (erythorbic) acid (ISOASCORBIC ACID, ERYTHORBIC ACID)	antioxidant
E316	Sodium isoascorbate (SODIUM ISOASCORBATE)	antioxidant
E319	tertiary Butylhydroquinone (TERTIARY BUTYLHYDROQUINONE)	antioxidant
E320	Butylated hydroxyanisole (BUTYLATED	antioxidant

	HYDROXYANISOLE)	
E321	Butylated hydroxytoluene, “Ionol” (BUTYLATED HYDROXYTOLUENE)	antioxidant
E322	Lecithins, phosphatides (LECITHINS)	antioxidant, emulsifier
E325	Sodium lactate (SODIUM LACTATE)	humectant, filling agent
E326	Potassium lactate (POTASSIUM LACTATE)	acidity regulator
E327	Calcium lactate (CALCIUM LACTATE)	acidity regulator, flour treatment agent
E328	Ammonium lactate (AMMONIUM LACTATE)	acidity regulator, flour treatment agent
E329	Magnesium lactate, DL- (MAGNESIUM LACTATE, DL-)	acidity regulator, flour treatment agent
E330	Citric acid (CITRIC ACID)	acidity regulator, antioxidant
E331	Sodium citrates (SODIUM CITRATES): (i) Sodium dihydrogen citrate (Sodium dihydrogen citrate), (ii) Disodium hydrogen citrate (Disodium monohydrogen citrate), Trisodium citrate (Trisodium citrate).	acidity regulator, emulsifier, stabilizer, carrier
E332	Potassium citrates (POTASSIUM CITRATES): (i) Potassium dihydrogen citrate (Potassium dihydrogen citrate), (ii) Tripotassium citrate (Tripotassium citrate)	acidity regulator, stabilizer, carrier
E333	Calcium citrates (CALCIUM CITRATES)	acidity regulator, stabilizer
E334	Tartaric acid, L(+)- (TARTARIC ACID, L(+)-)	acidity regulator, antioxidant
E335	Sodium tartrates (SODIUM TARTRATES): (i) Monosodium tartrate (Monosodium tartrate), (ii) Disodium tartrate (Disodium tartrate).	stabilizer
E336	Potassium tartrates (POTASSIUM TARTRATES): (i) Monopotassium tartrate (Monopotassium tartrate), (ii) Dipotassium tartrate (Dipotassium tartrate).	stabilizer
E337	Potassium sodium tartrate (POTASSIUM SODIUM TARTRATE)	stabilizer
E338	orthophosphoric acid (ORTHOPHOSPHORIC ACID)	acidity regulator, antioxidant

E339	Sodium phosphates (SODIUM PHOSPHATES): (i) monosodium orthophosphate (Monosodium orthophosphate), (ii) disodium orthophosphate (Disodium orthophosphate), (iii) trisodium orthophosphate (Trisodium orthophosphate).	acidity regulator, emulsifier, humectant, stabilizer, emulsifying salt
E340	Potassium phosphates (POTASSIUM PHOSPHATES): (i) monopotassium orthophosphate (Monopotassium orthophosphate), (ii) dipotassium orthophosphate (Dipotassium orthophosphate), (iii) tripotassium orthophosphate (Tripotassium orthophosphate).	acidity regulator, emulsifier, humectant, stabilizer, emulsifying salt
E341	Calcium phosphates (CALCIUM PHOSPHATES): (i) monocalcium orthophosphate (Monocalcium orthophosphate), (ii) dicalcium orthophosphate (Dicalcium orthophosphate), (iii) tricalcium orthophosphate (Tricalcium orthophosphate).	acidity regulator, flour treatment agent, stabilizer, leavening agent, anti-clumping agent, humectant, emulsifying salt, carrier
E342	Ammonium phosphates (AMMONIUM PHOSPHATES): (i) monoammonium orthophosphate (Monoammonium orthophosphate), (ii) diammonium orthophosphate (Diammonium orthophosphate).	acidity regulator, flour treatment agent
E343	Magnesium phosphates (MAGNESIUM PHOSPHATES): (i) monomagnesium orthophosphate (Monomagnesium orthophosphate), (ii) dimagnesium orthophosphate (Dimagnesium orthophosphate), (iii) trimagnesium orthophosphate (Trimagnesium orthophosphate).	acidity regulator, anti-clumping agent
E350	Sodium malates (SODIUM MALATES): (i) Sodium hydrogen malate (Sodium hydrogen malate), (ii) Sodium malate (Sodium malate).	acidity regulator, humectant, emulsifier, stabilizer, emulsifying salt
E351	Potassium malates (POTASSIUM MALATES): Potassium hydrogen malate (Potassium hydrogen malate), Potassium malates (Potassium malate).	acidity regulator, humectant, emulsifier, stabilizer, emulsifying salt

E352	Calcium malates (CALCIUM MALATES); (i) Calcium hydrogen malate (Calcium hydrogen malate), (ii) Calcium malate (Calcium malate).	acidity regulator, humectant, emulsifier, stabilizer, emulsifying salt
E353	Metatartaric acid (METATARTARIC ACID)	acidity regulator
E354	Calcium tartrate (CALCIUM TARTRATE)	acidity regulator
E355	Adipic acid (ADIPIC ACID)	acidity regulator
E356	Sodium adipates (SODIUM ADIPATES)	acidity regulator
E357	Potassium adipates (POTASSIUM ADIPATES)	acidity regulator
E359	Ammonium adipates (AMMONIUM ADIPATES)	acidity regulator
E363	Succinic acid (SUCCINIC ACID)	acidity regulator
E365	Sodium fumarates (SODIUM FUMARATES)	acidity regulator
E380	Ammonium citrates (AMMONIUM CITRATES)	acidity regulator
E381	Ferric ammonium citrate (FERRIC AMMONIUM CITRATE)	acidity regulator
E384	Isopropil citrates mixture (ISOPROPYL CITRATES)	antioxidant, preservative
E385	Calcium disodium edta (CALCIUM DISODIUM EDTA)	antioxidant, preservative
E386	Disodium ethylene diamine-tetra-acetate (DISODIUM ETHYLENE DIAMINE-TETRA-ACETATE)	antioxidant, preservative
E387	Oxystearin (OXYSTEARIN)	antioxidant,
E392	Extracts of rosemary (EXTRACTS OF ROSEMARY)	antioxidant
E400	Alginic acid (ALGINIC ACID)	thickening agent, stabilizer, carrier
E401	Sodium alginate (SODIUM ALGINATE)	thickening agent, stabilizer, carrier
E402	Potassium alginate (POTASSIUM ALGINATE)	thickening agent, stabilizer
E403	Ammonium alginate (AMMONIUM ALGINATE)	thickening agent, stabilizer, carrier
E404	Calcium alginate (CALCIUM ALGINATE)	thickening agent, stabilizer, anti-foaming agent, carrier
E405	Propylene glycol alginate (PROPYLENE GLYCOL ALGINATE)	thickening agent, emulsifier, carrier
E406	Agar (AGAR)	thickening agent, gelling agent, stabilizer, carrier
E407	Carrageenan and its Na, K, NH <sub>4</sub> salts (includes furcellaran)(CARRAGEENAN AND ITS Na, K, NH <sub>4</sub> SALTS (INCLUDES FURCELLARAN))	thickening agent, gelling agent, stabilizer, carrier

E407a	Carrageenan PES - Processed Euchema Seaweed (CARRAGEENAN PES- PROCESSED EUCHEMA SEAWEED)	thickening agent, gelling agent, stabilizer, carrier
E409	Arabinogalactan (ARABINO GALACTAN)	thickening agent, gelling agent, stabilizer
E410	Carob bean gum (CAROB BEAN GUM)	thickening agent, stabilizer, carrier
E412	Guar gum (GUAR GUM)	thickening agent, stabilizer, carrier
E413	Tragacanth gum (TRAGACANTH GUM)	thickening agent, stabilizer, emulsifier, carrier
E414	Gum arabic (GUM ARABIC (ACACIA GUM))	thickening agent, stabilizer, carrier
E415	Xantan gum (XANTAN GUM)	thickening agent, stabilizer, carrier
E416	Karaya gum (KARAYA GUM)	thickening agent, stabilizer
E417	Tara gum (TARA GUM)	thickening agent, stabilizer
E418	Gellan gum (GELLAN GUM)	thickening agent, stabilizer, gelling agent
E420	Sorbitol (SORBITOL) (i) Sorbitol (SORBITOL) (ii) Sorbitol syrup (SORBITOL SYRUP)	sweetener, humectant, emulsifier, carrier
E421	Mannitol (MANNITOL)	sweetener, anti-clumping agent, carrier
E422	Glycerol (GLYCEROL)	humectant, thickening agent, carrier
E425	Konjac (Konjac flour) (KONJAC (KONJAC FLOUR)): (i) Konjac gum (KONJAC GUM), (ii) Konjac glucomannane (KONJAC GLUCOMANNANE).	thickening agent
E426	Soybean hemicellulose (SOYBEAN HEMICELLULOSE)	thickening agent, stabilizer
E427	Cassia gum (CASSIA GUM)	thickening agent, stabilizer
E430	Polyoxyethylene (8) stearate (POLYOXYETHYLENE (8) STEARATE)	emulsifier
E431	Polyoxyethylene (40) stearate (POLYOXYETHYLENE (40) STEARATE)	emulsifier



E432	Polyoxyethylene (20) sorbitan monolaurate, Tween 20 (POLYOXYETHYLENE (20) SORBITAN MONOLAURATE)	thickening agent, carrier
E433	Polyoxyethylene (20) sorbitan monooleate, Tween 80 (POLYOXYETHYLENE (20) SORBITAN MONOOLEATE)	thickening agent, carrier
E434	Polyoxyethylene (20) sorbitan monopalmitate, Tween 40 (POLYOXYETHYLENE (20) SORBITAN MONOPALMITATE)	thickening agent, carrier
E435	Polyoxyethylene (20) sorbitan monostearate, Tween 60 (POLYOXYETHYLENE (20) SORBITAN MONOSTEARATE)	thickening agent, carrier
E436	Polyoxyethylene (20) sorbitan tristearate (POLYOXYETHYLENE (20) SORBITAN TRISTEARATE)	thickening agent, carrier
E440	Pectins (PECTINS)	thickening agent, stabilizer, gelling agent, carrier
E442	Ammonium salts of phosphatidic acid (AMMONIUM SALTS OF PHOSPHATIDIC ACID)	emulsifier, carrier
E444	Sucrose acetate isobutirat (SUCROSE ACETATE ISOBUTIRAT)	emulsifier, stabilizer
E445	Glycerol esters of wood resin (GLYCEROL ESTERS OF WOOD RESIN)	emulsifier, stabilizer
E450	Diphosphates (DIPHOSPHATES): (i) Disodium diphosphate (Disodium diphosphate), (ii) Trisodium diphosphate (Trisodium diphosphate), (iii) Tetrasodium diphosphate (Tetrasodium diphosphate); (iv) Dipotassium diphosphate (Dipotassium diphosphate), (v) Tetrapotassium diphosphate (Tetrapotassium diphosphate), (vi) Dicalcium diphosphate (Dicalcium diphosphate), (vii) Calcium dihydrogen diphosphate (Calcium dihydrogen diphosphate).	emulsifier, stabilizer, acidity regulator, leavening agent, humectant
E451	Triphosphates (TRIPHOSPHATES): (i) Pentasodium triphosphate (Pentasodium triphosphate), (ii) Pentapotassium triphosphate (Pentapotassium triphosphate).	acidity regulator
E452	Polyphosphates (POLYPHOSPHATES): (i) Sodium polyphosphate (Sodium polyphosphate), (ii) Potassium polyphosphate (Potassium polyphosphate),	emulsifier, stabilizer, humectant

	(iii) Sodiumcalcium polyphosphate (Sodiumcalcium polyphosphate), (iv) Calcium polyphosphates (Calcium polyphosphates), (v) Ammonium polyphosphates (Ammonium polyphosphates).	
E459	beta-Cyclodextrin (BETA-CYCLODEXTRIN)	stabilizer, carrier
E460	Cellulose (CELLULOSE): (i) Microcrystalline cellulose (Microcrystalline cellulose), (ii) Powdered cellulose (Powdered cellulose).	emulsifier, anti-clumping agent, carrier
E461	Methyl cellulose (METHYL CELLULOSE)	thickening agent, emulsifier, stabilizer, carrier
E462	Ethyl cellulose (ETHYL CELLULOSE)	filling agent, carrier
E463	Hydroxypropyl cellulose (HYDROXYPROPYL CELLULOSE)	thickening agent, emulsifier, stabilizer
E464	Hydroxypropyl methyl cellulose (HYDROXYPROPYL METHYL CELLULOSE)	thickening agent, emulsifier, stabilizer, carrier
E465	Methyl ethyl cellulose (METHYL ETHYL CELLULOSE)	thickening agent, emulsifier, stabilizer, foaming agent, carrier
E466	Carboxymethyl cellulose (CARBOXYMETHYL CELLULOSE) Sodium carboxymethyl cellulose (SODIUM CARBOXYMETHYL CELLULOSE)  Cellulose gum (CELLULOSE GUM)	thickening agent, stabilizer, carrier
E467	Ethyl hydroxyethyl cellulose (ETHYL HYDROXYETHYL CELLULOSE)	emulsifier, thickening agent, stabilizer
E468	Croscarmellose (cross-linked sodium carboxymethyl cellulose) - CROSCARMELLOSE (CROSS-LINKED SODIUM CARBOXYMETHYL CELLULOSE)	stabilizer, carrier
E469	Enzymatically hydrolyzed carboxymethyl cellulose (ENZYMATICALLY HYDROLYSED CARBOXYMETHYL CELLULOSE) Enzymatically hydrolyzed cellulose gum (ENZYMATICALLY HYDROLYSED CELLULOSE GUM)	thickening agent, stabilizer, carrier
E470	Salts of myristic, oleinic, palmitic and stearic fatty acids and their mixtures (with base Al, Ca, Na, Mg, K and NH <sub>4</sub> ) (SALTS OF MYRISTIC, PALMITIC AND	emulsifier, stabilizer, anti-clumping agent, carrier

	STEARIC FATTY ACIDS (with base Al, Ca, Na, Mg, K and NH <sub>4</sub> )	
E471	Mono- and diglycerides of fatty acids (MONO- AND DIGLYCERIDES OF FATTY ACIDS)	emulsifier, stabilizer, carrier
E472a	Esters acetic and fatty acid of glycerol (ESTERS ACETIC AND FATTY ACID OF GLYCEROL)	emulsifier, stabilizer, carrier
E472b	Esters lactic and fatty acid of glycerol (ESTERS LACTIC AND FATTY ACID OF GLYCEROL)	emulsifier, stabilizer,
E472c	Citric and fatty acid esters of glycerol (CITRIC AND FATTY ACID ESTERS OF GLYCEROL)	thickening agent, stabilizer, carrier
E472d	Tartaric acid esters of mono- and diglycerides of fatty acids (TARTARIC ACID ESTERS OF MONO- AND DIGLYCERIDES OF FATTY ACIDS)	emulsifier, stabilizer
E472e	Diacetyltartaric and fatty acid esters of glycerol (DIACETYLTARTARIC AND FATTY ACID ESTERS OF GLYCEROL)	emulsifier, stabilizer, carrier
E472f	Mixed tartaric, acetic and fatty acid esters of glycerol (MIXED TARTARIC, ACETIC AND FATTY ACID ESTERS OF GLYCEROL)	emulsifier, stabilizer,
E473	Sucrose esters of fatty acids (SUCROSE ESTERS OF FATTY ACIDS)	emulsifier, carrier
E474	Sucroglycerides (SUCROGLYCERIDES)	emulsifier
E475	Polyglycerol esters of fatty acids (POLYGLYCEROL ESTERS OF FATTY ACIDS)	emulsifier, carrier
E476	Polyglycerol esters of interesterified ricinoleic acid (POLYGLYCEROL ESTERS OF INTERESTERIFIED RICINOLEIC ACID)	emulsifier
E477	Propylene glycol esters of fatty acids (PROPYLENE GLYCOL ESTERS OF FATTY ACIDS)	emulsifier
E479	Thermally oxidized soya bean oil with mono- and diglycerides of fatty acids (THERMALLY OXIDIZED SOYABEAN OIL WITH MONO- AND DIGLYCERIDES OF FATTY ACIDS)	emulsifier
E480	Dioctyl sodium sulphosuccinate (DIOCTYL SODIUM SULPHOSUCCINATE)	emulsifier, stabilizer, humectant
E481	Sodium stearyl -2- lactylate (SODIUM STEAROYL -2- LACTYLATE)	emulsifier, stabilizer
E482	Calcium stearyl -2- lactylate (CALCIUM STEAROYL -2- LACTYLATE)	emulsifier, stabilizer
E483	Stearyl tartrate (STEARYL TARTRATE)	flour treatment agent
E484	Stearyl citrate, (STEARYL CITRATE)	emulsifier

E491	Sorbitan monostearate, SPAN 60 (SORBITAN MONOSTEARATE)	emulsifier, carrier
E492	Sorbitan tristearate (SORBITAN TRISTEARATE)	emulsifier, carrier
E493	Sorbitan monolaurate, SPAN 20 (SORBITAN MONOLAURATE)	emulsifier, carrier
E494	Sorbitan monooleate, SPAN 80 (SORBITAN MONOOLEATE)	emulsifier, carrier
E495	Sorbitan monopalmitate (SORBITAN MONOPALMITATE)	emulsifier, carrier
E500	Sodium carbonates (SODIUM CARBONATES): (i) Sodium carbonate (Sodium carbonate), (ii) Sodium hydrogen carbonate (Sodium hydrogen carbonate), (iii) Sodium sesquicarbonate (Sodium sesquicarbonate).	acidity regulator, leavening agent, anti-clumping agent
E501	Potassium carbonates (POTASSIUM CARBONATES): (i) Potassium carbonate (Potassium carbonate), (ii) Potassium hydrogen carbonate (Potassium hydrogen carbonate).	acidity regulator, stabilizer, carrier
E503	Ammonium carbonates (AMMONIUM CARBONATES): (i) Ammonium carbonate (Ammonium carbonate), (ii) Ammonium hydrogen carbonate (Ammonium hydrogen carbonate).	acidity regulator, leavening agent
E504	Magnesium carbonates (MAGNESIUM CARBONATES): (i) Magnesium carbonate (Magnesium carbonate), (ii) Magnesium hydrogen carbonate (Magnesium hydrogen carbonate).	acidity regulator, anti-clumping agent, colour retention agent, carrier
E507	Hydrochloric acid (HYDROCHLORIC ACID)	acidity regulator
E508	Potassium chloride (POTASSIUM CHLORIDE)	gelling agent, carrier
E509	Calcium chloride (CALCIUM CHLORIDE)	firming agent, carrier
E510	Ammonium chloride (AMMONIUM CHLORIDE)	flour treatment agent
E511	Magnesium chloride (MAGNESIUM CHLORIDE)	firming agent, carrier
E513	Sulphuric acid (SULPHURIC ACID)	acidity regulator
E514	Sodium sulphates (SODIUM SULPHATES)	acidity regulator, carrier
E515	Potassium sulphates (POTASSIUM SULPHATES)	acidity regulator, carrier

E516	Calcium sulphate (CALCIUM SULPHATE)	flour treatment agent, firming agent, carrier
E517	Ammonium sulphate (AMMONIUM SULPHATE)	flour treatment agent, stabilizer, carrier
E518	Magnesium sulphate (MAGNESIUM SULPHATE)	firming agent
E520	Aluminium sulphate (ALUMINIUM SULPHATE)	firming agent
E521	Aluminium sodium sulphate, sodium alum (ALUMINIUM SODIUM SULPHATE)	firming agent
E522	Aluminium potassium sulphate, potassium alum (ALUMINIUM POTASSIUM SULPHATE)	acidity regulator, stabilizer
E523	Aluminium ammonium sulphate, ammonium alum (ALUMINIUM AMMONIUM SULPHATE)	stabilizer, firming agent
E524	Sodium hydroxide (SODIUM HYDROXIDE)	acidity regulator
E525	Potassium hydroxide (POTASSIUM HYDROXIDE)	acidity regulator
E526	Calcium hydroxide (CALCIUM HYDROXIDE)	acidity regulator, firming agent
E527	Ammonium hydroxide (AMMONIUM HYDROXIDE)	acidity regulator
E528	Magnesium hydroxide (MAGNESIUM HYDROXIDE)	acidity regulator, colour retention agent
E529	Calcium oxide (CALCIUM OXIDE)	acidity regulator, flour treatment agent
E530	Magnesium oxide (MAGNESIUM OXIDE)	anti-clumping agent
E535	Sodium ferrocyanide (SODIUM FERROCYANIDE)	anti-clumping agent
E536	Potassium ferrocyanide (POTASSIUM FERROCYANIDE)	anti-clumping agent
E538	Calcium ferrocyanide (CALCIUM FERROCYANIDE)	anti-clumping agent
E 539	Sodium thiosulphate (SODIUM THIOSULPHATE)	antioxidant, flour treatment agent
E541	Sodium aluminium phosphate acidic (SODIUM ALUMINIUM PHOSPHATE ACIDIC)	acidity regulator, emulsifier
E542	Bone phosphate (calcium phosphate) (BONE PHOSPHATE (essentiale Calcium phosphate, tribasic))	emulsifier, anti-clumping agent, humectant
E551	Silicon dioxide amorphous (SILICON DIOXIDE AMORPHOUS)	anti-clumping agent, carrier
E552	Calcium silicate (CALCIUM SILICATE)	anti-clumping agent, carrier

E553	Magnesium silicates (MAGNESIUM SILICATES): (i) Magnesium silicate (Magnesium silicate), (ii) Magnesium trisilicate (Magnesium trisilicate), (iii) Talc (Talc).	anti-clumping agent
E554	Sodium aluminosilicate (SODIUM ALUMINOSILICATE)	anti-clumping agent
E555	Potassium aluminium silicate (POTASSIUM ALUMINIUM SILICATE)	anti-clumping agent
E556	Calcium aluminium silicate (CALCIUM ALUMINIUM SILICATE)	anti-clumping agent
E558	Bentonite (BENTONITE)	anti-clumping agent, carrier
E559	Aluminium silicate (kaolin) - ALUMINIUM SILICATE (KAOLIN)	anti-clumping agent, carrier
E570	Fatty acids (FATTY ACIDS)	stabilizer, glazing agent, anti-foaming agent, carrier
E574	Gluconic acid (D-) (GLUCONIC ACID (D-))	acidity regulator, antioxidant, leavening agent
E575	Glucono delta-lactone (GLUCONO DELTA-LACTONE)	acidity regulator, antioxidant, leavening agent
E576	Sodium gluconate (SODIUM GLUCONATE)	acidity regulator, antioxidant
E577	Potassium gluconate (POTASSIUM GLUCONATE)	acidity regulator, antioxidant, carrier
E578	Calcium gluconate (CALCIUM GLUCONATE)	acidity regulator, firming agent
E579	Ferrous gluconate (FERROUS GLUCONATE)	colour retention agent
E580	Magnesium gluconate	acidity regulator, antioxidant, firming agent
E585	Ferrous lactate (FERROUS LACTATE)	colour retention agent
E586	4-Hexylresorcinol (4-HEXYLRESORCINOL)	antioxidant
E620	Glutamic acid, L(+)- (GLUTAMIC ACID, L(+)-)	flavour and smell enhancer
E621	Monosodium glutamate (MONOSODIUM GLUTAMATE)	flavour and smell enhancer
E622	Monopotassium glutamate (MONOPOTASSIUM GLUTAMATE)	flavour and smell enhancer

E623	Calcium glutamate (CALCIUM GLUTAMATE)	flavour and smell enhancer
E624	Monoammonium glutamate (MONOAMMONIUM GLUTAMATE)	flavour and smell enhancer
E625	Magnesium glutamate (MAGNESIUM GLUTAMATE)	flavour and smell enhancer
E626	Guanylic acid (GUANYLIC ACID)	flavour and smell enhancer
E627	Disodium 5'- guanylate (DISODIUM 5'- GUANYLATE)	flavour and smell enhancer
E628	Dipotassium 5'- guanylate (DIPOTASSIUM 5'- GUANYLATE)	flavour and smell enhancer
E629	Calcium 5'-guanylate (CALCIUM 5'-GUANYLATE)	flavour and smell enhancer
E630	Inosinic acid (INOSINIC ACID)	flavour and smell enhancer
E631	Disodium 5'- inosinate (DISODIUM 5'- INOSINATE)	flavour and smell enhancer
E632	Potassium inosinate (POTASSIUM INOSINATE)	flavour and smell enhancer
E633	Calcium 5'-inosinate (CALCIUM 5'-INOSINATE)	flavour and smell enhancer
E634	Calcium 5'- ribonucleotides (CALCIUM 5'- RIBONUCLEOTIDES)	flavour and smell enhancer
E635	Disodium 5' - ribonucleotides (DISODIUM 5' - RIBONUCLEOTIDES)	flavour and smell enhancer
E636	Maltol (MALTOL)	flavour and smell enhancer
E637	Ethyl maltol (ETHYL MALTOL)	flavour and smell enhancer
E640	Glycine and its sodium salt (GLYCINE AND ITS SODIUM SALT)	flavour and smell enhancer, carrier
E650	Zinc acetate (ZINC ACETATE)	flavour and smell enhancer
E900	Polydimethylsiloxane (POLYDIMETHYLSILOXANE)	anti-foaming agent, emulsifier, anti-clumping agent
E901	Beeswax, white and yellow (BEESWAX, WHITE AND YELLOW)	glazing agent, carrier
E902	Candelilla wax (CANDELILLA WAX)	glazing agent
E903	Carnauba wax (CARNAUBA WAX)	glazing agent
E904	Shellac (SHELLAC)	glazing agent

E905c(i)	Microcrystalline wax (MICROCRYSTALLINE WAX),	glazing agent
E905d	Mineral oil (high viscosity) - MINERAL OIL (HIGH VISCOSITY)	glazing agent
E905e	Mineral oil (medium and low viscosity, class I) - MINERAL OIL (MEDIUM AND LOW VISCOSITY, CLASS I)	glazing agent
E907	Hydrogenated poly-1-decene (HYDROGENATED POLY-1-DECENE)	glazing agent
E912	Montanic (octocosoic) acid esters (MONTANIC ACID ESTERS)	glazing agent
E914	Oxidized polyethylene wax (OXIDIZED POLYETHYLENE WAX)	glazing agent
E920	Cysteine, L-, and its hydrochlorides- sodium and potassium salts (CYSTEINE, L-, AND ITS HYDROCHLORIDES- SODIUM AND POTASSIUM SALTS)	flour treatment agent
E927b	Carbamide (urea) - (CARBAMIDE (UREA))	flour treatment agent, flavour and smell enhancer
E928	Benzoyl peroxide (BENZOYL PEROXIDE)	flour treatment agent, preservative
E938	Argon (ARGON)	propellant, packaging gas
E939	Helium (GELLIUM)	propellant, packaging gas
E941	Nitrogen (NITROGEN)	propellant, packaging gas
E942	Nitrous oxide (NITROUS OXIDE)	propellant, packaging gas
E943a	Butane (BUTANE)	propellant, packaging gas
E943b	Isobutane (ISOBUTANE)	propellant, packaging gas
E944	Propane (PROPANE)	propellant, packaging gas
E948	Oxygen (OXYGEN)	propellant, packaging gas
E949	Hydrogen (HYDROGEN)	propellant, packaging gas
E950	Acesulfame potassium (ACESULFAME POTASSIUM)	sweetener, flavour and smell enhancer
E951	Aspartame (ASPARTAME)	sweetener, flavour and smell enhancer



E952	Cyclamic acid and its Na, Ca salts (CYCLAMIC ACID and Na, Ca salts)	sweetener
E953	Isomalt, isomaltitol (ISOMALT, ISOMALTITOL)	sweetener, anti-clumping agent, filling agent, carrier, glazing agent
E954	Saccharin (Na, K, Ca salts) (SACCHARIN and Na, K, Ca salts)	sweetener
E955	Sucralose (trichlorogalacto-sucrose) (SUCRALOSE (TRICHLOROGALACTO-SUCROSE))	sweetener
E957	Thaumatococin (THAUMATOCOCIN)	sweetener, flavour and smell enhancer
E959	Neohesperidin dihydrochalcone (NEOHESPERIDINE DIHYDROCHALCONE)	sweetener, flavour and smell enhancer
E960	Steviol glycosides (STEVIOL GLYCOSIDES)	sweetener
E961	Neotame (NEOTAME)	sweetener, flavour and smell enhancer
E962	Salt of aspartame-acesulfame ( SALT OF ASPARTAME- ACESULFAME)	sweetener
E965	Maltitol and maltitol syrup (MALTITOL AND MALTITOL SYRUP)	sweetener, stabilizer, emulsifier, carrier
E966	Lactitol (LACTITOL)	sweetener, carrier
E967	Xylitol (XYLITOL)	sweetener, humectant, stabilizer, emulsifier
E968	Erythritol (ERYTHRITOL)	sweetener, humectant, stabilizer
E999	Quillaia extracts (QUILLAIA EXTRACTS)	foaming agent
E1200	Polydextroses (POLYDEXTROSES)	stabilizer, thickening agent, humectant, carrier
E1201	Polyvinylpyrrolidone (POLYVINYLPIRROLIDONE)	thickening agent, stabilizer, carrier
E1202	Polyvinylpolypyrrolidone (POLYVINYLPOLYPYRROLIDONE)	colour retention agent, stabilizer, carrier
E1203	Polyvinyl alcohol (POLYVINYL ALCOHOL)	humectant, glazing agent
E1204	Pullulan (PULLULAN)	glazing agent, thickening agent
E1400	Dextrins, roasted starch white and yellow (DEXTRINS, ROASTED STARCH WHITE AND YELLOW)	stabilizer, thickening agent

E1401	Acid treated starch (ACID TREATED STARCH)	stabilizer, thickening agent
E1402	Alkaline treated starch (ALKALINE TREATED STARCH)	stabilizer, thickening agent
E1403	Bleached starch (BLEACHED STARCH)	stabilizer, thickening agent
E1404	Oxidized starch (OXIDIZED STARCH)	emulsifier, thickening agent, carrier
E1405	Starches enzyme-treated (STARCHES ENZYME-TREATED)	thickening agent
E1410	Monostarch phosphate (MONOSTARCH PHOSPHATE)	stabilizer, thickening agent, carrier
E1412	Distarch phosphate (DISTARCH PHOSPHATE)	stabilizer, thickening agent, carrier
E1413	Phosphated distarch phosphate (PHOSPHATED DISTARCH PHOSPHATE)	stabilizer, thickening agent, carrier
E1414	Acetylated distarch phosphate (ACETYLATED DISTARCH PHOSPHATE)	emulsifier, thickening agent, carrier
E1420	Acetylated starch ( ACETYLATED STARCH)	stabilizer, thickening agent
E1422	Acetylated distarch adipate (ACETYLATED DISTARCH ADIPATE)	stabilizer, thickening agent, carrier
E1440	Hydroxypropyl starch (HYDROXYPROPYL STARCH)	emulsifier, thickening agent, carrier
E1442	Hydroxypropyl distarch phosphate (HYDROXYPROPYL DISTARCH PHOSPHATE)	stabilizer, thickening agent, carrier
E1450	Starch sodium octenyl succinate (STARCH SODIUM OCTENYL SUCCINATE)	stabilizer, thickening agent, emulsifier, carrier
E1451	Acetilated oxydised starch (ACETILATED OXYDISSED STARCH)	emulsifier, thickening agent
E1452	Starch aluminium octenyl succinate (STARCH ALUMINIUM OCTENYL SUCCINATE)	stabilizer, glazing agent
E1503	Castor oil (CASTOR OIL)	glazing agent, anti-clumping agent, filling agent
E1505	Triethyl citrate (TRIETHYL CITRATE)	foaming agent, carrier
E1517	Diacetin (glyceryl diacetat) - DIACETIN (GLYCERYL DIACETAT)	humectant, carrier
E1518	Triacetin (TRIACETIN)	humectant, carrier
E1519	Benzyl alcohol (BENZYL ALCOHOL)	carrier

E1520	Propylene glycol (PROPYLENE GLYCOL)	humectant, carrier
E1521	Polyethylene glycol (POLYETHYLENE GLYCOL)	glazing agent, stabilizer, carrier
-	Dihydroquercetin	antioxidant
-	Quercetin	antioxidant
-	Red rice (RED RICE)	colouring agent
-	Glycyrrhiza sp. extract (Glycyrrhiza sp.)	stabilizer, foaming agent
-	Acantophyllum sp. extract (Acantophyllum sp.)	stabilizer, foaming agent
-	Stevia (Stevia rebaudiana Bertoni), powder from leaves and syrup thereof, stevia extracts	sweetener
-	Sodium, potassium, calcium succinates	acidity regulators
-	Chitosan, chitosonium hydrochloride	filling agent, thickening agent, stabilizer

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HYGIENIC STANDARDS FOR THE USE OF  
ANTI-CAKING AGENTS (ANTI-CLUMPING AGENTS)

Food additive (E Number)	Food Products	Maximum Permissible Level in Products
Silicon dioxide amorphous (E551) Aluminium silicate (E559, Kaolin) Potassium aluminium silicate (E555) Calcium aluminium silicate (E556) Sodium aluminium silicate (E554) Bentonite (E558) Calcium silicate (E552) Magnesium silicate (E553i, E553ii, E553iii)- used separately or in combinations	Spices	30 g/kg
	Products in foil package	30 g/kg
	Dry powdered products including sugars	10 g/kg
	Tablet-form products	According to TD (Technical Documentation )
	Food supplements	According to TD
	Cheese and cheese analogues (hard, semi-hard, spreads), sliced and grate cheese	10 g/kg
	Sugar confectionery, excluding chocolate products (surface treatment)	According to TD
	Rice (only E553iii)	According to TD
	Sausage (surface treatment, only E553iii)	According to TD
	Salt and salt substitutes	10 g/kg
	Chewing gum (only E553iii)	According to TD
	Flavourings (only E551)	50 g/kg
	See Annex No.12	
Aluminium, ammonium, potassium, calcium, magnesium, sodium salts of fatty acids (namely myristic, oleic, palmitic, stearic acids and their combinations) (E470)	According to TD	According to TD
Isomalt, Isomaltitol (E953)	According to TD	According to TD
Calcium carbonate (E170) Magnesium carbonate (E504)	According to TD	According to TD
See Annex No.7		
Castor oil (E1503)	Cocoa and chocolate products	350 mg/kg
	Sugar confectionery	500 mg/kg
	Chewing gum	2,1 g/kg
	Food supplements	1 g/kg

	See Annexes No. 6 and No. 12	
Magnesium oxide (E530)	According to TD	According to TD
Dimethylpolysiloxane (E900)	Fats and frying oils	10 mg/kg
	Pineapple juice	10 mg/kg
	Canned and pasteurized fruit and vegetables	10 mg/kg
	Jams, fruit butters, jellies, marmalades, and other similar fruit spreads, including low calorie products	10 mg/kg
	Sugar confectionery excluding chocolate	10 mg/kg
	Chewing gum	100 mg/kg
	Extruded corn products	10 mg/kg
	Canned and concentrated soups and broths	10 mg/kg
	Non-alcoholic flavoured drinks	10 mg/kg
	Wines, cider	10 mg/kg
	Batter, including batter coating, for poultry and fish	10 mg/kg
	Flavourings	10 mg/kg
	See Annexes No. 12 and No. 15	
Potassium ferrocyanide (E536) Calcium ferrocyanide (E538) Sodium ferrocyanide (E535)- used separately or in combinations	Table salt, salt substitutes	20 mg/kg in terms of $K_4Fe(CN)_6$
Tricalcium phosphate (E341iii)	According to TD	According to TD
Trimagnesium phosphate (E343iii)	See Annexes No. 5, No. 7, No. 12 and No. 15	
Ammonium ferric citrate (E381)	Concentrates (liquid and powder) for water-based non-alcoholic flavoured drinks	10 mg/kg

## HYGIENIC STANDARDS FOR THE USE OF ANTIOXIDANTS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Ascorbic acid (E300) and its salts and esters: Potassium ascorbate (E303) Calcium ascorbate (E302) Sodium ascorbate (E301) Ascorbyl palmitate (E304i) Ascorbyl stearate (E304ii)	According to TD	According to TD
	See Annex No. 5, No. 17 and No. 18	
tert-Butylhydroquinone (E319, TBHQ)	See Butylated hydroxyanisole (E320, BHA)	
Butylated hydroxyanisole (E320, BHA) Butylated hydroxytoluene (E321, "Ionol", BHT) tert-Butylhydroquinone (E319, TBHQ) Gallic acid esters (gallates): Propyl gallate (E310) Octyl gallate (E311) Dodecyl gallate (E312)- used separately or in combinations <sup>1</sup>	Rendered animal fats and vegetable oils for professional manufacture of heat-treated food products	BHA - 200 mg/kg, BHT - 100 mg/kg, TBHQ -
	Frying oils and fats, excluding olive pomace oil	200mg/kg, Gallates- 200
	Lard, beef, poultry, sheep and fish fat	mg/kg (in terms of fat)
	Dehydrated meat	BHA- 200 mg/kg,
	Cake mixes (concentrates)	TBHQ - 200
	Breakfast cereals	mg/kg Gallates-
	Sauces	200 mg/kg (in
	Pre-cooked cereals	terms of fat)
Processed nuts		
Seasonings and condiments	BHA- 200 mg/kg, Gallates- 200	
	mg/kg (in terms of fat)	
Dehydrated potato	BHA- 25 mg/kg, TBHQ- 25 mg/kg Gallates- 25	
	mg/kg	
Chewing gum	BHA- 400 mg/kg, BHT- 400 mg/kg	
Food supplements	TBHQ- 400 mg/kg Gallates- 400	
	mg/kg	
Essential oils	BHA- 1 g/kg TBHQ- 1 g/kg Gallates- 1 g/kg	

	Flavourings (excluding essential oils)	BHA- 200 mg/kg TBHQ- 200 mg/kg Gallates- 100 mg/kg
Butylated hydroxytoluene (E321, "Ionol", BHT)	See Butylated hydroxyanisole (E320, BHA)	
Gallic acid esters (gallates): Propyl gallate (E310) Octyl gallate (E311) Dodecyl gallate (E312)	See Butylated hydroxyanisole (E320, BHA)	
Guaiac resin (E314)	Vegetable oils and animal fats	1 g/kg
	Chewing gum	1,5 g/kg
	Sauces and similar products	600 mg/kg
4-Hexylresorcinol (E586)	Crustaceans (fresh and frozen)	2 mg/kg as residues in crustacean meat
Gluconic acid (E574) and its salts: Gluconates: Potassium gluconate (E577) Calcium gluconate (E578) Magnesium gluconate (E580) Sodium gluconate (E576) Glucono delta-lactone (E575)	According to TD	According to TD
	See Annexes No. 5, No. 7 and No. 12	
Isoascorbic (erythorbic) acid (E315), Sodium isoascorbate (E316)- used separately or in combinations, in terms of isoascorbic acid	Semi-preserved and preserved meat products manufactured from minced meat, stuffing, ham	500 mg/kg
	Semi-preserved and preserved fish and caviar products, salt-cured fish, frozen fish with red skin	1,5 g/kg
	See Annex No. 17	
Isopropyl citrate mixture (E384)	Vegetable fats and oils, fish oil and other animal oils, including lard and salo	200 mg/kg
	Vegetable oil and butter fat-based spreads	100 mg/kg
	Farm and wild meat and game meat (poultry): fresh minced meat; canned (lump, minced and diced) meat products (including cured) and non-heat-treated dry meat products	200 mg/kg
	Non-alcoholic flavoured drinks, including specialized drinks	200 mg/kg
Quercetin, Dihydroquercetin – used separately or in combinations	Concentrated cream, dried milk, cheese spreads, chocolate	200 mg/kg (in terms of fat)
Lecithin (E322)	According to TD	According to TD
Citric acid (E330)	According to TD	According to TD
	See Annex No. 7	

Potassium lactate (E326), Calcium lactate (E327), Sodium lactate (E325)	According to TD	According to TD
	See Annex No. 5 and No. 7	
Sulfurous acid (Sulphur dioxide) (E220) and its salts: Potassium hydrogen (bisulphite) sulphite (E228) Calcium hydrogen sulphite (E227) Sodium hydrogen sulphite (E222) Potassium metabisulphite (E224) Sodium metabisulphite (E223) Potassium sulphite (E225) Calcium sulphite (E226) Sodium sulphite (E221)	See Annexes No. 8	
Sodium thiosulphate (E539)	Iodized salt	250 mg/kg
	See Annexes No. 5 and No. 7	
Tocopherols: Alpha-tocopherol (E307) Gamma-tocopherol (synthetic) (E308) Delta-tocopherol (synthetic) (E309) Tocopherol mixture (concentrate) (E306)	According to TD	According to TD
Calcium disodium ethylene diamine tetraacetate (E385, Calcium disodium EDTA) Disodium ethylene diamine tetraacetate (E386, Disodium EDTA) - used separately or in combinations	Spreads and margarines with fat content of less than 41%	100 mg/kg
	Fish, canned and pasteurized crustaceans and molluscs	75mg/kg
	Frozen crustaceans	75mg/kg
	Canned and pasteurized legumes, vegetables, mushrooms and artichokes	250 mg/kg
	Non-alcoholic flavoured drinks, including specialized drinks	200 mg/l
	Sauces	75mg/kg
Extracts of rosemary (E392), in terms of Carnosol and Carnosine acid sum	Vegetable oils, excluding olive pomace oil, and fats with more than 15 % polyunsaturated fatty acids by volume for manufacture of non-heated food products	30 mg/kg (in terms of fat)



Fish oil and algae oil; Lard, beef, poultry, sheep and pork fat Rendered animal fats and vegetable oils for the manufacture of heat-treated food products Frying oil and fat, excluding olive pomace oil for frying (deep-frying, culinary, and confectionary fats) Breakfast (snacks) based on cereals, potato and starch	50 mg/kg (in terms of fat)
Sauces	100 mg/kg (in terms of fat)
Fine bakery products	200 mg/kg (in terms of fat)
Food supplements	400 mg/kg
Dehydrated potato Egg products Chewing gum	200 mg/kg
Seasonings and condiments Processed nuts	200 mg/kg (in terms of fat)
Soups and broths (concentrated)	50 mg/kg
Dehydrated meat	150 mg/kg
Meat and fish products (excluding dehydrated meat and dried, cured sausages)	150 mg/kg (in terms of fat)
Dried, cured sausages	100 mg/kg
Flavourings	1 g/kg
Dried milk for production of milk-based ice cream	30 mg/kg

Note:

<sup>1</sup>- Maximum permissible level for antioxidants of Butylated hydroxyanisole, Butylated hydroxytoluene, tert-Butylhydroquinone and gallates are indicated for conditions when they are used separately; in case of their use in combinations, maximum permissible level of separate antioxidants shall be reduced in proportion, i.e. total sum (expressed in per cents of maximum permissible level of separate antioxidants) shall not exceed 100%.

## HYGIENIC STANDARDS FOR THE USE OF FLOUR TREATMENT AGENTS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Sodium aluminium phosphate (acidic) (E541)	See Annex No. 7	
Ascorbic acid (E300) and its salts and esters: Potassium ascorbate (E303) Calcium ascorbate (E302) Sodium ascorbate (E301) Ascorbyl palmitate (E304i) Ascorbyl stearate (E304ii)	According to TD See Annex No. 4, No. 17, and No. 18	According to TD
Glycerol (E422)	According to TD See Annex No. 12	According to TD
Calcium gluconate (E578) Glucono delta-lactone (E575)	According to TD See Annexes No. 4 and No. 7	According to TD
Lactic acid (E270) and its salts: Ammonium lactate (E328) Potassium lactate (E326) Calcium lactate (E327) Magnesium lactate (E329) Sodium lactate (325)	According to TD See Annex No. 4 and No. 7	According to TD
Calcium oxide (E529)	According to TD See Annex No. 7	According to TD
Benzoyl peroxide (E928)	Flour	75 mg/kg
	Whey (powder and liquid), and whey products excluding whey cheese	100 mg/kg (l)
Polyoxyethene sorbitan (esters of polyoxyethene sorbitan and fatty acids - tweens): Polyoxyethene sorbitan (20) monolaurate (E432, tween 20) Polyoxyethene sorbitan(20) monooleate (E433, tween 80) Polyoxyethene sorbitan (20) monopalmitate (E434, tween 40) Polyoxyethene sorbitan (20) monostearate (E435, tween 60) Polyoxyethene sorbitan(20) tristearate (E436, tween 65)	See Annex No. 15	
Propylene glycol alginate (E405)	See Annex No. 15	
Sucroglycerides (E474) Sucrose esters of fatty acids (E473)- used separately or in combinations	See Annex No. 15	

Sorbitans, esters of sorbitol and fatty acids: Sorbitan monostearate (E491, SPAN 60) Sorbitan tristearate (E492, SPAN 65) Sorbitan monolaurate (E493, SPAN 20) Sorbitan monooleate (E494, SPAN 80) Sorbitan monopalmitate (E495, SPAN 40)	See Annexes No. 12 and No. 15	
Ammonium sulphate (E517)	According to TD	According to TD
Calcium sulphate (E516)	See Annex No. 7 and No. 12	
Sodium thiosulphate (E539)	Flour	50 mg/kg
	See Annex No. 4 and No. 7	
Potassium phosphate (E340) Calcium phosphate (E341) Magnesium phosphate (E343) Sodium phosphate (E339) Diphosphates (E450) Triphosphates (E451) Polyphosphates (E452)	See Annexes No. 3, No. 7, No. 12, and No. 15	
Ammonium chloride (E510)	According to TD	According to TD
	See Annex 7	
Cystein and its sodium potassium hydrochloride salts (E920)	Bread and flour products, fine bakery products	According to TD

## HYGIENIC STANDARDS FOR THE USE OF GLAZING AGENTS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Beeswax white and yellow (E901), Candelilla wax (E902), Shellac (E904)	Fresh citrus fruits, melons, pineapples, peaches, pears and apples (surface treatment)	According to TD
	Confectionery, dragee, chocolate, fine bakery products coated with chocolate	According to TD
	Chewing gum	According to TD
	Breakfast cereals (snacks), nuts	According to TD
	Coffee beans	According to TD
	Food supplements	According to TD
	Milk-based ice cream wafers (only E901)	According to TD
	Flavourings: Non-alcoholic flavoured drinks (only E901)	0,2 g/kg (in a ready-to-eat product)
Carnauba wax (E903)	Fresh citrus fruits, melons, pineapples, peaches, pears and apples	200 mg/kg
	Confectionery, dragee, chocolate	500 mg/kg
	Fine bakery products coated with chocolate	200 mg/kg
	Chewing gum	1.2 g/kg
	Breakfast cereals (snacks), nuts	200 mg/kg
	Coffee beans	200 mg/kg
	Food supplements	200 mg/kg
Castor oil	See Annex No. 3 and No. 12	
Starch aluminium octenyl succinate (E1452)	See Annex No. 15	
Microcrystalline wax (E905ci)	Confectionery, dragee, nougat	According to TD
	Chewing gum	20 g/kg
	Melons, mango, papaya and avocado	According to TD
	Ripened cheeses heel	30 g/kg
	Surface treatment of fresh fruits, vegetables, mushrooms, legumes, nuts and seeds	50 mg/kg
Mineral oil (of high viscosity) E905d	Dried fruits	5 g/kg
	Cocoa products, chocolate products, including imitation chocolate and chocolate substitutes	2 g/kg
	Confectionery, dragee, nougat	2 g/kg

	Chewing gum	20 g/kg
	Toppings and coatings (excluding fruit-based)	2 g/kg
	Grain, including rice (whole, milled, flaked)	800 mg/kg
	Fine bakery products (baked goods)	3 g/kg
	Undivided, minced or cut frozen meat, poultry and game products	950 mg/kg
Mineral oil (of medium and low viscosity, class I) E905e	Dried fruits	5 g/kg
	Confectionery	2 g/kg
	Bread and bakery wares	3 g/kg
Polyvinyl alcohol (E1203)	Frozen fish (in glazing solutions)	According to TD
	Film-coating for surface treatment of sausage products, sausages and cheeses and their coatings	According to TD
	Food supplements in capsule and tablet forms	18 g/kg
Hydrogenated poly-1-decene (E907)	Sugar confectionery	2 g/kg
	Dried fruits	2 g/kg
Polyethylene glycol (E1521)	Fresh fruits	According to TD
	See Annexes No. 12 and No. 15	
Oxidezed polyethylene wax (E914) Montan (octocosoic) acid esters (E912)	Fresh citrus fruit, melons, mango, papaya, avocado and pineapples	According to TD
Pullulan (E1204)	Food supplements in capsule and tablet form	According to TD
	Breath fresheners	According to TD

## HYGIENIC STANDARDS FOR THE USE OF ACIDS AND ACIDITY REGULATORS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Adipic acids (E355) and adipates: Ammonium adipate (E359) Potassium adipate (E357) Sodium adipate (E356)- used separately or in combinations, in terms of acid	Dry flavoured desserts	1 g/kg
	Gel-like desserts	6 g/kg
	Powdered mixes for home preparation of drinks	10 g/kg
	Fillings and toppings for fine bakery products and flour confectionery products	2 g/kg
Sodium aluminium phosphate acidic (E541)	Flour confectionery products (fancy and sponge wares only)	1 g/kg in terms of aluminium
	See Annex No. 5	
Tartaric acids (E334) and tartates: Potassium tartate (E336) Calcium tartate (E354) Sodium tartate (E335) Sodium potassium tartate (E337)	According to TD	According to TD
	See Annex No. 15	
Metatartaric acid (E353)	Wines	in accordance with regulations of authorized organisations
Ammonium hydroxide (E527)	According to TD	According to TD
Potassium hydroxide (E525)	According to TD	According to TD
Calcium hydroxide (E526)	According to TD	According to TD
Magnesium hydroxide (E528)	According to TD	According to TD
Sodium hydroxide (E524)	According to TD	According to TD
Gluconic acid (E574) and gluconates: Potassium gluconate (E577) Calcium gluconate (E578) Magnesium gluconate (E580) Sodium gluconate (E576) Glucono delta-lacton (E575)	According to TD	According to TD
	See Annexes No. 4, No. 5 and No. 12	
	See Annex No. 17	
	According to TD	According to TD
	See Annexes No. 4, No. 12 and No. 18	
Citric acid (E330) and citrates: Ammonium citrate (E380) Potassium citrate (E332) Calcium citrate (E333) Sodium citrate (E331)	According to TD	According to TD
	See Annexes No. 4, No. 12 and No. 18	
	See Annex No. 3	
	According to TD	According to TD
Ammonium ferric citrate (E381)	See Annex No. 3	
Lactic acid (E270) and lactates:	According to TD	According to TD

Ammonium lactate (E328) Potassium lactate (E326) Calcium lactate (E327) Magnesium lactate (E329) Sodium lactate (E325)	See Annexes No. 4 and No. 5	
Ferrous lactate (E585)	See Annex No. 17	
Calcium oxide (E529)	According to TD	According to TD
	See Annex No. 5	
Sulphuric acid (E513) and sulphates: Ammonium sulphate (E517) Potassium sulphate (E515) Calcium sulphate (E516) Magnesium sulphate (E518) Sodium sulphate (E514)	According to TD	According to TD
Sulphates: Aluminium sulphate (E520)	Egg white	30 mg/kg
Aluminium ammonium sulphate (E523) Aluminium potassium sulphate (E522) Aluminium sodium sulphate (E521)- used separately or in combinations in terms of aluminium	Sugar glazed (candied), crystallized and glacé fruit and vegetables	200 mg/kg
Hydrochloric acid (E507) and chlorides: Ammonium chloride (E510) Potassium chloride (E508) Calcium chloride (E509) Magnesium chloride (E511)	According to TD	According to TD
Sodium thiosulphate (E539)	See Annexes No. 5 and No. 12	
Carbon dioxide (E290) solid, liquid, gas, and carbonates: Ammonium carbonate (E503) Potassium carbonate (E501) Calcium carbonate (E170) Magnesium carbonate (E504) Sodium carbonate (E500)	According to TD	According to TD
	See Annexes No. 3, No. 11, No. 12, No. 15 and No. 17	
Acetic acid (E260) and acetates: Ammonium acetate (E264) Potassium acetate (E261) Calcium acetate (E263) Sodium acetate (E262)	According to TD	According to TD
	See Annex No. 8, No. 12, and No. 15	
Zinc acetate (E650)	See Annex No. 16	
Orthophosphoric acid (E338)	See Annexes No. 3, No. 5, No. 12 and No. 15	

and food grade phosphates: Potassium phosphate (E340) Calcium phosphate (E341, E542) Magnesium phosphate (E343) Sodium phosphate (E339) Diphosphates (E450) Triphosphates (E451) Polyphosphate (E452)		
Fumaric acid (E297) Sodium fumarate (E365)-  used separately or in combinations, expressed as fumaric acid	Wines	in accordance with regulations of authorized organisations
	Fillings and toppings for fine bakery products and flour confectionery products	2,5 g/kg
	Sugar confectionery	1 g/kg
	Gel-like desserts, Fruit flavoured desserts, Dry powdered dessert mixes	4 g/kg
	Instant powdered fruit bases for drinks	1 g/kg
	Instant products for preparation of flavoured teas and herbal teas (infusions)	1 g/kg
	Chewing gum	2 g/kg
Malic acid (E296) and malates: Potassium malate (E351) Calcium malate (E352) Sodium malate (E350)	According to TD  See Annex No. 18	According to TD
Succinic acid (E363) and succinates: Potassium succinate Calcium succinate Sodium succinate-	Desserts	6 g/kg
	Powdered mixtures for home preparation of non-alcoholic drinks	3 g/kg
	Canned (concentrated) soups and broths	5 g/kg
used separately or in combinations, in terms of succinic acid	Vodka	100 mg/l



## HYGIENIC STANDARDS FOR THE USE OF PRESERVATIVES

Food additive (E number)	Food products	Maximum Permissible Level in Products
Benzoic acid (E210) and benzoates: Sodium benzoate (E211) Potassium benzoate (E212) Calcium benzoate (E213)- used separately or in combinations in terms of benzoic acid	Fat emulsion products (excluding butter) with a fat content 60% or more, confectionery creams	500 mg/kg
	Fat emulsion products (excluding butter) with a fat content of less than 60%, confectionery creams	1 g/kg
	Olives and olive-based preparations	500 mg/kg
	Cooked red beet	2 g/kg
	Tomato-based products (excluding juices)	1g/kg
	Jam, marmalades, jellies, low-sugar paste- like fruit butters and with no sugars added	500 mg/kg
	Vegetable oil-based emulsified sauces, mayonnaises, dressings, creams, based on vegetable oils with a fat content 60% and more	500 mg/kg
	Vegetable oil-based emulsified sauces, mayonnaises, dressings, mayonnaise sauces, creams based on vegetable, oils with a fat content of less than 60%	1 g/kg
	Non-emulsified sauces	1 g/kg
	Liquid egg products (white, yolk or whole egg)	5 g/kg
	Non-alcoholic flavoured drinks	150 mg/kg
	Alcohol-free beer in kegs (casks)	200 mg/kg
	Spirits with less than 15% of alcohol by volume	200 mg/kg
	Jellies for aspic	500 mg/kg
	Liquid tea, fruit and herbal infusions concentrates	600 mg/kg

	Non-heat-treated dairy-based desserts	300 mg/l
	Vegetables in vinegar, brine or oil (excluding olives)	2 g/kg
	Sugar glazed (candied) fruit and vegetables	1 g/kg
	Chewing gum	1,5 g/kg
	Semi-preserved fish products including caviar	2 g/kg
	Salted, cured fish	200 mg/kg
	Crustaceans and molluscs (cooked)	1 g/kg
	Prepared salads	1,5 g/kg
	Mustard	1 g/kg
	Seasonings and condiments	1 g/kg
	Liquid soups and broths (excluding canned)	500 mg/kg
	Dietetic foods intended for special medical purposes excluding foods for children, dietetic formulae for weight control	1,5 g/kg
	Sugar confectionery, sweets, chocolate with filling	1,5 g/kg
	Dried fruits	800 mg/kg
	Toppings and coatings, including for fine bakery products, coatings (excluding fruit-based), custards	1,500 mg/kg
	Surface treatment of sausage products, sausages and cheeses, including contained in film-coatings	According to TD
	Cured meat products (surface treatment)	According to TD
	Flavourings	1,5 g/kg
	Analogues of algae-based fish products	500 mg/kg
	Beer in kegs with added sugar (more than 0.5%) for fermentation and/or fruit juices, and concentrated juice	200 mg/kg
	Liquid food supplements	2 g/kg
	Powdered food supplements containing vitamin A or vitamins A and D	1 g/kg (in products ready for consumption)
Dehydroacetic acid (E265), Sodium dehydroacetate (E266)- used separately or in combinations in terms of dehydroacetic acid	Surface treatment of sausage products, sausages, cheeses and coatings, including as part of film-coating	5 mg/kg (residues in products)

Dimethyl dicarbonate (E242)	Non-alcoholic flavoured drinks, alcohol-free wines, liquid tea and herbal infusions, coffee, coffee substitutes and other bean-based hot beverages, excluding cocoa	250 mg/l for treatment, residues not allowed
	Cider and perry, fruit wines, low-alcohol wines, wine-based drinks	250 mg/l for treatment, residues not allowed
Diphenyl (biphenyl)- (E230)	Surface treatment of citrus fruits	70 mg/kg
Formic acid (E236)	Non-alcoholic water-based flavoured drinks, including specialized drinks (sport, tonic, including energy drinks)	100 mg/l
	Sauces and similar products	200 mg/kg
Natamycin (pimaracin, delvolid)- (E235)	Surface treatment of cheeses, smoked and semi-smoked sausages	1 mg/dm <sup>2</sup> (at a depth of up to 5 mm)
Nisin (E234)	Semolina and tapioca puddings and similar products	3 mg/kg
	Ripened and cheese spreads	12,5 mg/kg
	Curd cheese and cream cheese (Mascarpone)	10 mg/kg
	Liquid egg products (white, yolk or whole egg)	6,25 mg/l
Potassium nitrate (E252) Sodium nitrate (E251)- used separately or in combinations in terms of NaNO <sub>3</sub> (residues)	Salted, cooked, smoked sausage and meat products; canned meat products	250 mg/kg
	Hard, semi-hard and soft cheese	50 mg/kg
	Dairy-based cheese substitutes	50 mg/kg
	Pickled herring and sprat	200 mg/kg (as NaNO <sub>2</sub> , including nitrite)
Potassium nitrite (E249) Sodium nitrite (E250)- used separately or in combinations in terms of NaNO <sub>2</sub> (residues) <sup>1</sup>	Smoked, salted smoked, cured sausages and meat products	50 mg/kg
	Cooked sausages and other cooked meat products	50 mg/kg
	Canned meat products	50 mg/kg
Methylparaben (methyl para-hydroxybenzoate) (E218) Sodium methyl para-hydroxybenzoate (E219) Ethyl para-hydroxybenzoate (E214) Sodium ethyl para-hydroxybenzoate (E215)- "Parabens"	Jelly coatings of meat products (cooked, cured or dried); Pâté	1 g/kg
	Cereal- and potato-based snacks coated with nuts	300 mg/kg
	Sugar confectionery, sweets, chocolate with filling	300 mg/kg

used separately or in combinations in terms of benzoic acid	Cured meat products (surface treatment)	According to TD
Propionic acid (E280) and propionates: Potassium propionate (E283) Calcium propionate (E282) Sodium propionate (E281)- used separately or in combinations in terms of propionic acid	Pre-packed sliced white bread and rye bread for long-time storage	3 g/kg
	Pre-packed energy reduced bread, fine bakery products (including flour confectionery), pitta	2 g/kg
	Pre-packed sliced white bread for long-time storage, Easter cake, Christmas cake	1 g/kg
	Cheese and cheese substitutes (surface treatment)	According to TD
Sulphur dioxide (E220) and sulphites: Potassium hydrogen sulphite (bisulphite) (E228) Calcium hydrogen sulphite (E227) Sodium hydrogen sulphite (E222) Potassium metabisulphite (E224) Sodium metabisulphite (E223) Potassium sulphite (E225) Calcium sulphite (E226) Sodium sulphite (E221)- used separately or in combinations in terms of sulphur dioxide <sup>2</sup>	Dehydrated cabbage	800 mg/kg
	Peeled potatoes (treatment with browning inhibitors)	50 mg/kg
	Potato products, including frozen potatoes; instant potato puree	100 mg/kg
	Dehydrated potato granules (dried riced potatoes)	400 mg/kg
	Dried white vegetables	400 mg/kg
	Frozen white vegetables	50 mg/kg
	Onion, garlic and shallot pulp	300 mg/kg
	Tomato paste made from sulphited mass (with 30%-content of dry substance) (except tomato paste for juice products)	400 mg/kg
	Dried tomatoes	200 mg/kg
	Mushroom products, including frozen mushrooms	50 mg/kg
	Dried mushrooms	100 mg/kg
	Vegetables and fruit in vinegar, brine or oil (except olives)	100 mg/kg
	Sugar glazed (candied), fruit, vegetables, citrus peel and angelica	100 mg/kg
	Jams, marmalades, jellies, fruit butters with low sugar content or with no added sugars, and other similar products	50 mg/kg
	Jams, jellies, marmalades, fruit butters made with sulphited fruit and berries	100 mg/kg
	Fruit fillings (fruit-based fillings)	100 mg/kg
	Citrus-juice-based seasonings	200 mg/kg
	Pasteurized, sliced lemon	250 mg/kg

Pasteurized, rehydrated, dried fruits	100 mg/kg
Dried fruits: -apricots, peaches, grapes (raisin), prunes and figs -bananas -apples and pears -other (including nuts in shell)	2 g/kg 1 g/kg 600 mg/kg 500 mg/kg
Semi-finished products (pulp products) for industrial processing: -strawberries, raspberries -cherries -other fruit and berries	2 g/kg 3 g/kg 1,5 g/kg
Sugar	15 mg/kg
Dehydrated high-glucose treacle	20 mg/kg
Treacle and molasses	70 mg/kg
Other sugars	40 mg/kg
High-glucose-treacle-based sweets and sugar confectionery	50 mg/kg (residues from treacle)
Dry biscuit	50 mg/kg
Starches (excluding starches for infant formulae);	50 mg/kg
Cereal- and potato-based snacks	50 mg/kg
Sago, pearl barley	30 mg/kg
Burger meat with a minimum vegetable and/or cereal content of 4%	450 mg/kg
Salted, cured fish	200 mg/kg
Crustaceans and cephalopods: -fresh, frozen Crustaceans Penaeidae, Solenoceridae, Aristaeidae: fresh, frozen, -cooked	150 mg/kg in edible parts 300 mg/kg in edible parts 50 mg/kg in edible parts
Crustaceans Penaeidae, Solenoceridae, Aristaeidae: cooked	270 mg/kg in edible parts
Orange, grapefruit, apple and pineapple juice for bulk dispensing in catering establishments	50 mg/l
Lime and lemon juice	350 mg/kg

Fruit juice for preparation of drinks	100 mg/kg
Concentrates based on fruit juice and containing not less than 2.5% barley (barley water)	350 mg/kg
Other concentrates based on fruit juice or comminuted fruit	250 mg/kg
Non-alcoholic flavoured drinks containing fruit juice	20 mg/kg residues from concentrates
Non-alcoholic drinks, containing at least 235 g/l high-glucose treacle	50 mg/kg
Beer, including low-alcohol and alcohol-free beer	20 mg/kg
Beer with a second fermentation in casks	50 mg/kg
Grape wine	300 mg/kg
Fruit wine, including sparkling wines, cider; Mead	200 mg/kg
Alcohol-free wines	200 mg/kg
Fermentation vinegar	170 mg/kg
Mustard	250 mg/kg
Mostarda di frutta	100 mg/kg
Jellying fruit extracts, liquid pectin for sale to the final consumers	800 mg/kg
Gelatin	50 mg/kg
Horseradish pulp	800 mg/kg
Dried ginger	150 mg/kg
Dried coconut	50 mg/kg
Flavoured syrups for milkshakes, ice cream syrups for pancakes, Easter cakes, similar products	40 mg/kg
Protein-based meat, fish and crustacean products analogues	200 mg/kg
Marinated nuts	50 mg/kg
Vacuum packed sweetcorn	100 mg/kg
Distilled alcoholic beverages containing whole pears	50 mg/kg
Grape for table use	10 mg/kg
Fresh lychees	10 mg/kg in edible parts

	Blueberries (only <i>Vaccinium corybosum</i> )	10 mg/kg
	Cinnamon (only <i>Cinnamomum ceylanicum</i> )	150 mg/kg
	See Annex No. 4	
Sorbic acid (E200) and sorbates: Sodium sorbate (E201) Potassium sorbate (E202) Calcium sorbate (E203)- used separately or in combinations, in terms of sorbic acid	Fresh cheese with fillings; Pre-packed sliced cheese	1 g/kg
	Cheese spreads	2 g/kg
	Cheese and cheese substitutes (surface treatment)	According to TD
	Curd products, Pasha	1 g/kg
	Fat emulsion products (excluding butter) with a fat content 60% or more -1 g/kg	1 g/kg
	Olives and olive-based products	1 g/kg
	Potato puree and pre-fried potato slices	2 g/kg
	Fruit and vegetable canned and pasteurized products, including sauces, excluding puree, mousse, compote, salads and similar products	1 g/kg
	Tomato-based products (excluding juices)	1 g/kg
	Dried fruits	1 g/kg
	Extruded corn products	2 g/kg
	Bread, fine bakery products (including flour confectionery), including energy reduced, prepacked for long-time storage	2 g/kg
	Analogues of meat, fish, crustaceans and cephalopods products and substitutes of cheeses based on protein	2 g/kg
	Dehydrated, concentrated and frozen egg products	1 g/kg
	Liquid egg products (white, yolk or whole egg)	5 g/kg

Vegetable oil-based emulsified sauces, mayonnaises, dressings, mayonnaise sauces creams, based on vegetable oils with a fat content 60% and more	1 g/l
Vegetable oil-based emulsified sauces, mayonnaises, dressings, creams based on vegetable oils with a fat content of less than 60%	2 g/l
Non-emulsified sauces	1 g/kg
Non-alcoholic flavoured drinks	300 mg/l
Wine-based flavoured drinks	200 mg/l
Wines, ordinary, fruit, honey, cider, alcohol-free wines	300 mg/kg
Spirits with less than 15% of alcohol by volume	200 mg/kg
Jellies for aspic	1 g/kg
Flavoured syrups for milkshakes, ice cream, etc. syrups for pancakes, Easter cakes,	1 g/kg
Fillings for ravioli, dumplings	1 g/kg
Surface treatment of sausage products, sausages, cheeses and coatings, including film-coating	According to TD
Non-heat-treated dairy-based desserts	300 mg/l
Vegetables in vinegar, brine or oil (excluding olives)	2 g/kg
Sugar glazed (candied), fruit and vegetables	1 g/kg
Jam, marmalades, jellies, fruit butters with low-sugar content and with no sugar added, paste-like	1 g/kg
Fruit and berry and fruit and cream-based fillings for flour confectionery products	1 g/kg
Chewing gum	1,5 g/kg
Semi-preserved fish products including caviar	2 g/kg
Salted, cured fish	200 mg/kg



	Crustaceans and molluscs (cooked)	2 g/kg
	Prepared salads	1,5 g/kg
	Mustard	1 g/kg
	Seasonings and condiments	1 g/kg
	Dietetic foods intended for special medical purposes excluding foods for children Dietetic formulae for weight control	1,5 g/kg
	Liquid tea, fruit and herbal infusions concentrates	600 mg/kg
	Jelly coatings for meat products (cooked, cured or dried); Pâté	1 g/kg
	Liquid soups and broths (excluding canned)	500 mg/kg
	Cereal- and potato-based snacks coated with nuts	1 g/kg
	Sugar confectionery, sweets, chocolate with filling	1,5 g/kg
	Cured meat products (surface treatment)	According to TD
	Flavourings	1,5 g/kg
	Analogues of algae-based fish products	1 g/kg
	Beer in kegs with added sugar for fermentation (more than 0.5%) and/or fruit juice, and/or concentrated juice	200 mg/kg
	Surface treatment of fresh citrus fruits	20 mg/kg
	Liquid food supplements	2 g/kg
	Powdered food supplements containing vitamin A or vitamins A and D in various combinations	1 g/kg  in products ready for consumption
Sorbic acid and sorbates (E200, E201, E202, E203) in combination with benzoic acid and benzoates (E210, E211, E212, E213) - used separately or in combinations,	Non-heat-treated dairy-based desserts	300 mg/l
	Fat emulsion products (excluding butter) with a fat content 60% or more, confectionery creams	1 g/kg including benzoates not more than 500

in terms of relevant acid

	mg/kg
Fat emulsion products with a fat content less than 60%, confectionery creams	2 g/kg including benzoates not more than 1 g/kg
Vegetables in vinegar, brine or oil (excluding olives)	2 g/kg
Tomato-based products (excluding juices)	1 g/kg
Olives and olive-based products;	1 g/kg including benzoates not more than 500 mg/kg
Sugar glazed (candied), fruit and vegetables	1 g/kg
Jam, marmalades, jellies, fruit butters with low-sugar content and with no sugar added, paste-like	1 g/kg including benzoates not more than 500 mg/kg
Chewing gum	1,5 g/kg
Semi-preserved fish products including caviar	2 g/kg
Salted, cured fish	200 mg/kg
Crustaceans and molluscs (cooked)	2 g/kg including benzoates not more than 1 g/kg
Vegetable oil-based emulsified sauces, mayonnaises, dressings, mayonnaise sauces creams, based on vegetable oils with a fat content 60% and more	1 g/kg including benzoates not more than 500 mg/kg;
Vegetable oil-based emulsified sauces, mayonnaises, dressings, creams, based on vegetable oils with a fat content of less than 60%	2 g/kg including benzoates not more than 1 g/kg;
Non-emulsified sauces	1 g/kg
Liquid egg products (white, yolk or whole egg)	5 g/kg

	Prepared salads	1,5 g/kg
	Mustard	1 g/kg
	Seasonings and condiments	1 g/kg
	Dietetic foods intended for special medical purposes excluding foods for children, Dietetic formulae for weight control	1,5 g/kg
	Non-alcoholic flavoured drinks	400 mg/kg including sorbates not more than 250 mg/kg, benzoates not more than 150 mg/kg;
	Spirits with less than 15% of alcohol by volume	400 mg/kg including each not more than 200 mg/kg
	Liquid tea, fruit and herbal infusions concentrates	600 mg/kg
	Liquid soups and broths (excluding canned)	500 mg/kg
	Sugar confectionery, sweets, chocolate with filling	1,5 g/kg
	Cured meat products (surface treatment)	According to TD
	Flavourings	1,5 g/kg
	Beer in kegs with added sugar (more than 0,5%) for fermentation and/or fruit juice, and/or concentrated juice	400 mg/kg
	Powdered food supplements containing vitamin A or vitamins A and D	1 g/kg (in products ready for consumption)
	Liquid food supplements	2 g/kg
Sorbic acid and sorbates (E200, E201, E202, E203) in combination with parabens (E214, E215, E218, E219) - used separately or in combinations, in terms of sorbic and benzoic acids respectively	Jelly coatings for meat products (cooked, cured or dried); Pâté	1 g/kg
	Cereal- and potato-based snacks coated with nuts	1 g/kg including parabens not more than 300 mg/kg
	Sugar confectionery, sweets, chocolate with filling	1,5 g/kg including parabens not more than 300 mg/kg;
	Cured meat products (surface treatment)	According to TD

Sorbic acid and sorbates (E200, E201, E202, E203) in combination with benzoic acid and benzoates (E210, E211, E212, 213) and parabens (E214, E215, E218, E219)- used separately or in combinations, in terms of sorbic and benzoic acids respectively	Cured meat products (surface treatment) Sugar confectionery, sweets, chocolate with filling	According to TD 1,5 g/kg including parabens not more than 300 mg/kg;
Acetic acid (E260)	According to TD	According to TD
(E260) and acetates: Potassium acetate (E261) Calcium acetate (E263) Sodium acetate (E262)	See Annex No. 7, No. 12, No. 15	
Orthophenyl phenol (E231) Sodium orthophenyl phenol (E232)- used separately or in combinations in terms of orthophenyl phenol	Surface treatment of citrus fruits	12 mg/kg
Notes: <sup>1</sup> – permissible level of calcium nitrite and potassium nitrite in food products means their residues found in products bought via retail trade network. In case nitrates and nitrites are used in curing mixtures, permissible level of nitrites in such products includes as well nitrites formed from nitrates.		

**FOOD PRODUCTS NOT ALLOWED TO CONTAIN COLOURING AGENTS <sup>1</sup>**

Colouring agents are not allowed to be used for the manufacture of the following food products:

- 1) unprocessed foodstuffs;
- 2) sterilized or UHT milk, chocolate-based unflavoured milk;
- 3) unflavoured fermented dairy products, buttermilk;
- 4) milk, canned, concentrated, condensed unflavoured cream;
- 5) fresh, dry, canned vegetables (except olives), fruit, mushrooms including puree and paste;
- 6) egg and egg products (for Easter eggs colouring only the colouring agents specified in Annex No. 11 hereof are allowed);
- 7) meat, poultry, game, fish, crustaceans, molluscs (undivided, parted or minced), including minced meat, with no other ingredients added, uncooked;
- 8) flour, cereals, starches;
- 9) fresh, dry, canned fruit, vegetables, mushrooms, (including puree and paste); fruit and vegetable juices, fruit nectars, paste, puree;
- 10) tomato paste and sauce, canned tomatoes;
- 11) sugar, glucose, fructose, lactose;
- 12) honey;
- 13) cocoa-based products, chocolate ingredients in confectionery and other products;
- 14) pasta;
- 15) roasted coffee, chicory, tea, and extracts on their basis; tea, herbal, fruit preparations for infusions and their soluble mixes;
- 16) malt and malt-based drinks;
- 17) seasonings and condiments;
- 18) table salt, salt substitutes;
- 19) bottled drinking water;
- 20) wine, fruit alcohol, fruit-based alcoholic beverages and grape vinegar;
- 21) animal and vegetable oil and fat;
- 22) non-flavoured unripened and ripened cheeses;
- 23) bread;
- 24) specialized food products for children in good and bad health under the age of three

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Note:

<sup>1</sup> - except for cases specified in Annexes 10 and 11 hereof

## FOODS ALLOWED TO CONTAIN ONLY SPECIFIED COLOURING AGENTS

Food Products	Food Additive	Maximum Permissible Level in Products
Multbread	Caramel (E150 a, b, c, d)	According to TD
Beer, cider	Caramel(E150 a, b, c, d)	According to TD
Cow's butter, including butter with reduced fat content; melted cow's butter	Carotenes (E160a)	According to TD
Spreadable fats and melted mixtures, Fat emulsion products, Liquid-free fats, margarine	Annato (E160b, bixin, norbixin)	10 mg/kg <sup>1</sup>
	Carotenes (E160a)	According to TD
	Curcumin (E100)	According to TD
Cheese spreads flavoured	Annato (E160b, bixin, norbixin)	15 mg/kg <sup>1</sup>
Some cheeses made in accordance with regulations of authorized organisation	Annato (E160b, bixin, norbixin)	50 mg/kg <sup>1</sup>
	Carmines (E120)	125 mg/kg
	Anthcyanins (E163)	According to TD
	Carotenes (E160a)	According to TD
	Paprica extract, capsanthin, capsorubin (E160c)	According to TD
	Vegetable carbon (E153)	According to TD
	Chlorophyll (E140) and its copper complexes (E141 i, ii)	According to TD
Vinegar	Caramel (E150 a, b, c, d)	According to TD
Whiskey, grain and grape alcohol, rum, brandy	Caramel (E150 a, b, c, d)	According to TI (Technical Instructions)
Flavoured wines and flavoured wine-based drinks made in accordance with regulations of authorized organisation	Caramel (E150 a, b, c, d)	According to TD
Bittersweet soda drinks and bittersweet wines made in accordance with regulations of authorized organisation	Caramel (E150 a, b, c, d)	According to TD
	Curcumin (E100)	100 mg/l
	Riboflavins (E101 i, ii)	
	Tartrazine (E102)	
	Ponceau 4R (E124)	
	Azorubine (E122)	
	Quinoline Yellow (E104)	
	Allura Red AC (E129)	
	Carmines (E120)	
Sunset Yellow FCF (E110)		
- used separately or in combinations		
Vegetables in vinegar, brine or oil (except olives)	Anthcyanins(E163)	According to TD
	Carotenes (160a)	According to TD
	Beetroot Red, Betanin (E162)	According to TD
	Riboflavins (E101)	According to TD
	Caramel (E150 a, b, c, d)	According to TD

	Chlorophylls and Chlorophyllins (E140) and their copper complexes (E141)	According to TD
Cereal-based inflated and extruded and/or fruit flavoured snacks	Annatto (E160b, bixin, norbixin)	25 mg/kg <sup>1</sup>
	Carotenes (E160a)	According to TD
	Paprica oleoresin (extracts), capsanthin, capsorubin (E160c)	According to TD
	Caramel (E150c)	According to TD
	Anthcyanins(E163) Carmines (E120) Beetroot Red, Betanin (E162) - used separately or in combinations	200 mg/kg
Jams, jellies, marmalades, including products with pieces and other similar processed fruit products, including low-calorie products	Anthcyanins (E163)	According to TD
	Carotenes (E160a)	According to TD
	Beetroot Red, Betanin (E162)	According to TD
	Curcumin (E100)	According to TD
	Paprica extract, capsanthin, capsorubin (E160c)	According to TD
	Caramel (E150 a, b, c, d)	According to TD
	Chlorophylls and Chlorophyllins (E140) and their copper complexes (E141)	According to TD
	Sunset Yellow FCF (E110) Quinoline Yellow (E104) Green S (E142) Carmine (E120) Lycopene (E160d) Lutein (E161b) Ponceau 4R (E124)- used separately or in combinations	100 mg/kg
Frankfurters, small sausages, cooked sausages, Pâté, cooked meat	Curcumin (E100)	20 mg/kg
	Carmine (E120)	100 mg/kg
	Caramel (E150 a, b, c, d)	According to TD
	Carotenes (E160a)	20 mg/kg
	Paprica extract, capsanthin, capsorubin (E160c)	10 mg/kg
	Beetroot Red, Betanin (E162)	According to TD
	Red Rice	According to TD
Pork cured and smoked sausages, including sausages with paprika ( <i>Chorizo</i> , <i>Salchichon</i> )	Carmines (E120)	200 mg/kg
	Ponceau 4R (E124)	250 mg kg
	Red Rice	According to TD
Frankfurters with more than 6% of cereal and legume content; comminuted meat products with more than 4% of cereal, legume and vegetable content	Allura Red AC (E129)	25 mg/kg
	Carmines (E120)	100 mg/kg
	Caramel (E150 a, b, c, d)	According to TD
Dehydrated potato granules (dried riced potatoes)	Curcumin (E100)	According to TD
Green pea and pure from it, treated and canned	Brilliant Blue FCF (E133)	20 mg/kg
	Green S (E142)	10 mg/kg
	Tartrazine(E102)	100 mg/kg

Note: <sup>1</sup> - general carotenoids in terms of bixin or norbixin.

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## HYGIENIC STANDARDS FOR THE USE OF COLOURING AGENTS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Azorubine (E122, Carmoisine) Allura Red AC (E129) Beta-apo-8'-carotenal (C30) (E160e) Ethyl ester of beta-apo-8'-carotenic acid (C30) (E160f) Sunset Yellow FCF (E110) Quinoline Yellow (E104) Green S (E142) Fast Green FCF (E143) Indigo carmine (E132) Carmine (E120, Cochineal) Brown HT (E155) Curcumin (E100) Lycopene (160d) Lutein (E161b) Ponceau 4R (E124) Brilliant Blue FCF (E133) Patent Blue V (E131) Tartrazine (E102) Brilliant Black PN (E151)- used separately or in combinations	Non-alcoholic flavoured drinks <sup>1</sup>	100 mg/kg
	Glacé fruit and vegetables	200 mg/kg
	Canned fruit (coloured)	200 mg/kg
	Sugar confectionery <sup>1</sup>	300 mg/kg
	Coatings	500 mg/kg
	Fine bakery products and flour confectionery products <sup>1</sup>	200 mg/kg
	Milk-based ice cream, fruit ice <sup>1</sup>	150 mg/kg
	Desserts, including milk-based, flavoured <sup>1</sup>	150 mg/kg
	Flavoured cheese spreads	100 mg/kg
	Sauces, seasonings (dry and paste-like), pickles (small pickled vegetables) and similar products	500 mg/kg
	Mustard	300 mg/kg
	Fish and crustacean paste	100 mg/kg
	Crustaceans (semi-finished, cooked)	250 mg/kg
	Imitation salmon	500 mg/kg
	Surimi	500 mg/kg
	Fish roe	300 mg/kg
	Smoked fish	100 mg/kg
	Cereal-, potato- and starch-based snacks with seasoning ingredients: -extruded or inflated spicy flavoured snacks -other spicy flavoured products including nuts	200 mg/kg 100 mg/kg
	Edible coatings of cheeses and sausages	According to TD
	Dietetic foods intended to replace total daily meal including formulae for weight control	50 mg/kg
	Food supplements:	
	-solid	300 mg/kg
	-liquid	100 mg/kg
Soups	50 mg/kg	
Analogues of meat and fish based on vegetable protein	100 mg/kg	

	Alcoholic beverages, flavoured wines and wine-based drinks, fruit wines (including sparkling and still wines), cider	200 mg/kg
Annato extracts (E160b, bixin, norbixin)	Fat emulsion products , free-of-liquid fats	10 mg/kg <sup>2</sup>
	Edible ices, fruit ice, fruit ice cream	20 mg/kg
	Toppings and coatings	20 mg/kg <sup>2</sup>
	Fine bakery products and flour confectionery products	10 mg/kg <sup>2</sup>
	Liqueurs and fortified beverages with less than 15 % of alcohol by volume	10 mg/kg <sup>2</sup>
	Cheeses	15 mg/kg <sup>2</sup>
	Desserts, including milk-based ice cream	10 mg/kg
	Edible coatings for cheese	20 mg/kg <sup>2</sup>
	Smoked fish	10 mg/kg <sup>2</sup>
	Cereal-, potato- and starch-based snacks with seasoning ingredients: -extruded or inflated spicy flavoured snacks -other spicy flavoured products including nuts	200 mg/kg 100 mg/kg
	Cereal-based inflated and extruded and/or fruit flavoured snacks	25 mg/kg <sup>2</sup>
Anthocyanins (E163) Titanium dioxide (E171) Calcium carbonate (E170) Carotenes (E160a) Beetroot Red, Betanin (E162) Paprika extract, capsanthin, capsorubin (E160c) Iron oxides and Iron hydroxides (E172) Riboflavin (E101) Caramel (E150a, E150b, E150c, E150d) Edible Tannins (E181) Vegetable carbon (E153) Chlorophylls and Chlorophyllins (E140) Copper complexes of chlorophylls and chlorophyllins (E141)	According to TD <sup>3</sup> See Annexes No. 3 and No. 7	According to TD
Canthaxantin (E161g)	Strasbourg sausage	15 mg/kg
Red Rice	Meat products	According to TD
Silver (E174) Gold (E175)	Sugar confectionery, chocolate (toppings for fine bakery products ingredients, cakes and such products)	According to TD

## Notes:

<sup>1-</sup> The content of each of the following colouring agents - Azorubine (E122), Sunset Yellow FCF (E110), Brown HT (E155), Ponceau 4R(E124) shall not exceed 50 mg/kg for use in alcoholic-free beverages, confectionery and fine bakery products, desserts, ice cream and edible fruit ice.

<sup>2-</sup> General carotenoids in terms of bixin or norbixin.

<sup>3-</sup> The specified colouring agents are allowed for the manufacture of all food products excluding the food products covered by Annex No. 9. The content of colouring agents may be regulated for food products covered by Annex No. 10.

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## HYGIENIC STANDARDS FOR THE USE OF CARRIERS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Agar (E406)	According to TD	According to TD
	See Annex No. 15	
Alginic acid (E400) and alginates: Ammonium alginate (E403) Potassium alginate (E402) Calcium alginate (E404) Sodium alginate (E401)	According to TD	According to TD
	See Annex No. 15	
Aluminium silicate (E559, Kaolin)	Colouring agents	5 g/100g
	See Annex No. 3	
Potassium aluminium silicate (E555)	Colouring agents Titanium dioxide (E170), iron oxides and iron hydroxides (E171)	not more than 90% in respect of the colouring agent
Calcium acetate (E263)	According to TD	According to TD
	See Annex No. 7, No. 8 and No. 15	
Benzyl alcohol (E1519)- in both food products ready for consumption and food products restored in accordance with producer regulations (from all sources)	Flavourings for: -liqueurs, flavoured wines, flavoured drinks and wine-based cocktails	According to TD 100 mg/l
	-confectionery including chocolate, fine bakery products	250 mg/kg
Bentonite (E558)	Colouring agents	5 g/100g
	See Annex No. 3	
Beeswax (E901)	Colouring agents	According to TD
	See Annex No. 6	
Glycerol (E422)	According to TD	According to TD
	See Annex No. 5	
Glycine (E640) and its sodium salt	According to TD	According to TD
	See Annex No. 16	
Potassium gluconate (E577)	According to TD	According to TD
	See Annexes No. 4, No. 7	
Guar gum (E412)	According to TD	According to TD
	See Annex No. 15	
Gum arabic (Acacia gum) (E414)	According to TD	According to TD
	See Annex No. 15	
Diacetin (Glyceryl diacetate) (E1517)	See Triacetin (E1518)	
Silicon dioxide amorphous (E551)	Emulsifiers, Colouring agents	5 g/100g
	Colouring agents Titanium dioxide (E171) iron oxides and iron hydroxides (E172)	not more than 90% in respect of the

		colouring agent
	See Annex No. 3	
Fatty acids (E570)	Glazing agents for fruit	According to TD
	See Annex No. 15	
Isomalt, isomaltitol (E953)	According to TD	According to TD
Xylitol (E967)	See Annexes No. 13 and No. 15	
Lactitol (E966)		
Maltitiol and Maltitol syrup (E965)		
Mannitol (E421)		
Sorbitol (E420)		
Erythritol (E968)		
Sodium, potassium and calcium salts of fatty acids (E470)	Glazing agents for fruit	According to TD
	See Annexes No. 3 and No. 15	
Carob bean gum (E410)	According to TD	According to TD
	See Annex No. 15	
Potassium carbonate (E501)	According to TD	According to TD
Calcium carbonate (E170)	See Annex No. 3, No. 7, No. 11, No. 15 and No. 17	
Magnesium carbonate (E504)		
Carrageenan (E407, E407a)	According to TD	According to TD
	See Annex No. 15	
Castor oil (E1503)	According to TD	According to TD
	See Annex No. 3 and No. 6	
Konjak, Konjak flour (E425)	According to TD	According to TD
Konjak gum (E425i)	See Annex No. 15	
Konjak glucomannan (E425ii)		
Modified starches:	According to TD	According to TD
Acetylated starch (E1420)	See Annex No. 15	
Acetylated distarch adipate (E1422)		
Acetylated distarch phosphate (E1414)		
Acetylated oxidized starch (E1451)		
Distarch phosphate (E1412)		
Monostarch phosphate (E1410)		
Oxidized starch (E1404)		
Hydroxy propyl distarch phosphate (E1442)		
Hydroxy propyl starch (E1440)		
Phosphated distarch phosphate (E1413)		
Starch sodium octenyl succinate (E1450)		
Xanthan gum (E415)	According to TD	According to TD
	See Annex No. 15	

Lecithin (E322)	Glazing agents for fruit Colouring agents and Fat-soluble antioxidants	According to TD
	See Annex No. 15	
Magnesium salts of fatty acids (E470)	Colouring agents and Fat-soluble antioxidants	According to TD
	See Annexes No. 3 and No. 15	
Mono- and diglycerides of fatty acids (E471)	Glazing agents for fruit, Colouring agents and Fat-soluble antioxidants	According to TD
Pectins (E440)	According to TD	According to TD
	See Annex No. 15	
Polydextrose (E1200)	According to TD	According to TD
	See Annex No. 15	
Polyvinylpyrrolidone (E1201) Polyvinylpolypyrrolidone (E1202)	Sweeteners	According to TD
	See Annex No. 15	
Dimethyl polysiloxane (E900)	Glazing agents for fruit	According to TD
	See Annexes No. 3 and No. 15	
Polyoxyethene sorbitan (esters of polyoxyethene sorbitan and fatty acids - polisorbates): Polyoxyethene (20) sorbitan monolaurate (E432, polysorbate 20) Polyoxyethene (20) sorbitan monooleate (E433, polysorbate 80) Polyoxyethene (20) sorbitan monopalmitate (E434, polysorbate 40) Polyoxyethene (20) sorbitan monostearate (E435, polysorbate 60) Polyoxyethene (20) sorbitan tristearate (E436, polysorbate 65)	Colouring agents and Fat-soluble antioxidants Glazing agents for fruit Anti-foaming agents	According to TD
	See Annex No. 15	
Polyethylene glycol (1521)	Table sweeteners	10 g/kg
	See Annexes No. 6 and No. 15	
Propylene glycol (E1520, propan-1,2-diol)	Antioxidants Colouring agents Emulsifiers Enzymatic agents	1 g/kg in food products
	See Triacetin (E1518)	
Propylene glycol alginate (E405)	According to TD	According to TD
	See Annex No. 15	
Calcium silicate (E552)	Emulsifiers, Colouring agents	5 g/100g
	Colouring agents Titanium dioxide (E171) Iron oxides and hydroxides (E172)	not more than 90% in respect of the colouring agent
	See Annex No. 3	
Sorbitans, esters of sorbitol and fatty acids (E491-E495, SPANs): Sorbitan monostearate (E491, SPAN 60),	Colouring agents Anti-foaming agents	According to TD
	Glazing agents for fruit	

Sorbitan tristearate (E492, SPAN 65), Sorbitan monolaurate (E493, SPAN 20), Sorbitan monooleate (E494, SPAN80), Sorbitan monopalmitate (E495, SPAN 40)	See Annex No. 15	
Ammonium sulphate (E517), Potassium sulphate (E515),	According to TD	According to TD
	See Annex No. 5 and No. 7	
Calcium sulphate (E516) Sodium sulphate (E514)		
Talc (E553iii)	Colouring agents	5 g/100g
	See Annex No. 3	
Tragacanth (E413)	According to TD	According to TD
	See Annex No. 15	
Triacetin (E1518, glyceryl triacetate) Glyceryl diacetate (E1517) Triethyl citrate (E1505) Propylene glycol (E1520, propan-1,2- diol)- used separately or in combinations in both food products ready for consumption and food products restored in accordance with producer regulations (from all sources)	Flavourings:	According to TD
	-for food products -for drinks except cream-based liqueur (for Propylene glycol E1520)	3 g/kg 1 g/l
Triethyl citrate (E1505)	See Triacetin (E1518)	
	See Annex No. 15	
Ammonium salts of phosphatidic acid (Ammonium phosphatides (E442)	Antioxidants	According to TD
	See Annex No. 15	
Calcium phosphates (E341)	According to TD	According to TD
	See Annexes No. 3, No. 5, No. 7 and No. 15	
Potassium chloride (E508) Calcium chloride (E509) Magnesium chloride (E511)	According to TD	According to TD
	See Annex No. 7	
Cellulose (E460):	According to TD	According to TD

Microcrystalline cellulose(E460i) Powdered cellulose (E460ii) Modified cellulose: Hydroxy propyl methyl cellulose (E464), Hydroxy propyl cellulose (E463) Carboxymethyl cellulose (Sodium carboxymethyl cellulose) (E466) Enzymically hydrolysed carboxymethyl cellulose (E469) Methyl cellulose (E461) Ethyl methyl cellulose (E465) Ethyl cellulose (E462)	See Annex No. 15	
Crosslinked sodium carboxymethyl cellulose (Crosscarmellose) (E468)	Sweeteners	According to TD
Beta-cyclodextrin (E459)	According to TD	1 g/kg
	See Annex No. 15	
Potassium citrates (E332) Sodium citrates (E331)	According to TD	According to TD
	See Annexes No. 4 and No. 7	
Diacetyltartaric and fatty acid esters of glycerol (E472e),	Colouring agents and Fat-soluble antioxidants	According to TD
Acetic acid esters of mono- and diglycerides of fatty acids (E472a) Polyglycerol esters of fatty acids (E475) Sucrose esters of fatty acids (E473) Citric acid esters of mono- and diglycerides of fatty acids (E472c)	See Annex No. 15	



## HYGIENIC STANDARDS FOR THE USE OF SWEETENERS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Aspartame (E951)	Flavoured water-, fruit juice-, milk-, milk products-based non-alcoholic drinks, without added sugars or energy-reduced	600 mg/kg
	Water-based flavoured desserts Cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	1 g/kg
	Ready-to-eat flavoured snacks: packed, dry, starch- and nut-based spicy snack products	500 mg/kg
	Confectionery without added sugars	1 g/kg
	Confectionery energy-reduced or without added sugars	
	-starch-based	2 g/kg
	-based on cocoa and dried fruits	2 g/kg
	Cocoa-based sandwich spreads Sandwich spreads based on milk products, fat products and dried fruits	1 g/kg
	Chewing gum without added sugars	5,5 g/kg
	Ice cream (except cream ice and milk ice cream) edible fruit ice energy-reduced or without added sugars	800 mg/kg
Canned and pasteurized fruit energy-reduced or without added sugars	1 g/kg	
Jams, jellies, marmalades energy-reduced	1 g/kg	

	Processed fruit and vegetable products, energy-reduced	1 g/kg
	Semi-preserved sour-sweet fruit and vegetable products	300 mg/kg
	Sauces, mayonnaise, mustard, horseradish pulp	350 mg/kg
	Semi-preserved sour-sweet fish, pickled fish products, crustaceans and molluscs	300 mg/kg
	Dietetic fine bakery products and flour confectionery	1,7 g/kg
	Cereal-based snacks with edible fibre content of more than 15% or bran content of not less than 20%, energy-reduced or without added sugars	1 g/kg
	Energy-reduced soups	110 mg/l
	Cider and perry	600 mg/l
	Spirits with less than 15% of alcohol by volume	600 mg/l
	Beverages containing mixture of non-alcohol drinks and beer or cider, wines, or other alcoholic beverages	600 mg/l
	Alcohol-free beer or beer with not more than 1,2% of alcohol by volume; other beer of special types	600 mg/l
	Breath fresheners (in tablet and pastille form) without added sugars	6 g/kg
	Beer energy-reduced	25 mg/l
	Dietetic products including formulae for weight control	800 mg/kg
	Food supplements:	
	-liquid	600 mg/kg
	-solid	2 g/kg
	-vitamins and minerals in syrup and chewable tablet forms	5,5 g/kg
Aspartame-acesulfame salt (E962)- maximum permissible level in product: Potassium acesulfame- AC, Aspartame- AS <sup>1</sup>	Flavoured water-, fruit juice-, milk-, milk products-based non-alcoholic drinks, without added sugars or energy-reduced	350 mg AC/l

Water-, cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	350 mg AC/kg
Ready-to-eat flavoured snacks: packed, dry, starch- and nut-based spicy snack products	500 mg AC/kg
Confectionery without added sugars	500 mg AC/kg
Confectionery energy-reduced or without added sugars: -starch-based	1 g AC/kg
-based on cocoa and dried fruit	500 mg AC/kg
Cocoa-based sandwich spreads Sandwich spreads based on milk products, fat products and dried fruits	1 g AS/kg
Chewing gum without added sugars	2 g AC/kg
Ice cream (except cream ice and milk ice cream) Edible fruit ice energy-reduced or without added sugars	800 mg AS/kg
Canned and pasteurized fruit energy-reduced or without added sugars	350 mg AC/kg
Jams, jellies, marmalades, energy-reduced	1 g AS/kg
Processed fruit and vegetable products, energy-reduced	350 mg AC/kg
Semi-preserved sour-sweet fruit and vegetable products	200 mg AC/kg
Sauces, mayonnaise, mustard, horseradish, pulp	350 mg AS/kg
Semi-preserved sour-sweet fish, pickled fish products, crustaceans and molluscs	200 mg AC/kg
Cereal-based snacks with edible fibre content of more than 15% or bran content of not less than 20%, energy-reduced or without added sugars	1 g AS/kg
Soups energy-reduced	110 mg AS/l
Spirits with less than 15% of alcohol by volume	350 mg AC/l
Cider and perry	350 mg AC/l

	Beverages containing mixture of non-alcohol drinks and beer or cider (apple, pear), wines, other alcoholic beverages	350 mg AC/l
	Alcohol-free beer or beer with not more than 12% of alcohol by volume; other beer of special types	350 mg AC/l
	Beer energy-reduced	25 mg AS/l
	Breath fresheners (in tablet and pastille form) without added sugars	2,5 g AC/kg
	Dietetic fine bakery products and flour confectionery	1 g AC/kg
	Dietetic products including formulae for weight control	450 mg AC/kg
	Food supplements: -liquid	350 mg AC/kg
	-solid	500 mg AC/kg
	-vitamins and minerals in syrup and chewable tablet form	2 g AC/kg
Acesulfam potassium (E950)	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products without added sugars or energy-reduced	350 mg/kg
	Water-based flavoured desserts Cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	350 mg/kg
	Ready-to-eat flavoured snacks: packed, dry, starch- and nut-based spicy snack products	350 mg/kg
	Confectionery without added sugars	500 mg/kg
	Confectionery energy-reduced or without added sugars:  -starch-based -based on cocoa and dried fruits	1 g/kg  500 mg/kg
	Cocoa-based sandwich spreads	1 g/kg

Sandwich spreads based on milk products, fat products and dried fruits	
Chewing gum without added sugars	2 g/kg
Ice cream (except cream ice and milk ice cream) Edible fruit ice energy-reduced or without added sugars	800 mg/kg
Canned and pasteurized fruit energy-reduced or without added sugars	350 mg/kg
Jams, jellies, marmalades, energy-reduced	1 g/kg
Processed fruit and vegetable products, energy-reduced	350 mg/kg
Semi-preserved sour-sweet fruit and vegetable products	200 mg/kg
Semi-preserved sour-sweet fish, pickled fish products, crustaceans and molluscs	200 mg/kg
Dietetic fine bakery products and flour confectionery	1 g/kg
Cereal-based snacks with edible fibre content of more than 15% or bran content of not less than 20%, energy-reduced or without added sugars	1,2 g/kg
Soups energy-reduced	110 mg/l
Cider and perry	350 mg/l
Spirits with less than 15% of alcohol by volume	350 mg/kg
Beverages containing mixture of non-alcohol drinks and beer or cider, wines, or other alcoholic beverages	350 mg/kg
Alcohol-free beer or beer with not more than 1,2% of alcohol by volume; other beer of special types	350 mg /l
Breath fresheners (in tablet and pastille form) without added sugars	2,5 g/kg
Waffle and cones for ice cream, without added sugars	2 g/kg

	Sweets in tablet form energy-reduced	500 mg/kg
	Beer energy-reduced	25 mg/l
	Sauces, mayonnaise, mustard, horseradish, pulp	350 mg/kg
	Dietetic products including formulae for weight control	450 mg/kg
	Food supplements: -liquid -solid -vitamins and minerals in syrup and chewable tablet forms	350 mg/kg 500mg/kg 2 g/kg
Polyatomic alcohol- polyol: Maltitol and Maltitol syrup (E965) Isomalt (E953) Mannitol (E421) Sorbitol (E420) Xylitol (E967) Lactitol (E966) Erythritol (E968)	Desserts and similar products based on: water (flavoured), milk and milk products, fruit and vegetables processed products, cereals, eggs, fats, energy-reduced or without added sugars	According to TD
	Processed cereal-based snacks - energy-reduced or without added sugars	According to TD
	Ice cream (except cream ice and milk ice cream) Edible fruit ice energy-reduced or without added sugars	According to TD
	Jam, marmalades, jelly products, glacé fruit, fruit products (except products for fruit juice-based drinks) - energy-reduced or without added sugars	According to TD
	Confectionery: sweets including caramel, cocoa products without added sugars	According to TD
	Dried fruit- and starch-based confectionery, energy-reduced or without added sugars	According to TD
	Fine bakery products and flour confectionery energy-reduced or without added sugars	According to TD
	Chewing gum	According to TD
	Sauces, mayonnaise, mustard, horseradish, pulp	According to TD
	Solid dietary supplements and food supplements	According to TD
Non-alcoholic water-based flavoured drinks,		

Neohesperidine dihydrochalcone (E959)	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products without added sugars or energy-reduced	30 mg/kg
	Water-based flavoured desserts Cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	50 mg/kg
	Ready-to-eat flavoured snacks: packed, dry, starch- and nut-based spicy snack products	50 mg/kg
	Confectionery without added sugars	100 mg/kg
	Confectionery energy-reduced or without added sugars: <u>-starch-based</u>	150 mg/kg
	<u>-based on cocoa and dried fruits;</u>	100 mg/kg
	Cocoa-based sandwich spreads Sandwich spreads based on milk products, fat products and dried fruits	50 mg/kg
	Chewing gum without added sugars	400 mg/kg
	Breath fresheners (in tablet and pastille form) without added sugars	400 mg/kg
		Ice cream (except cream ice and milk ice cream), fruit ice energy-reduced or without added sugars
Canned and pasteurized fruit energy-reduced or without added sugars		50 mg/kg
Jams, jellies, marmalades, energy-reduced		50 mg/kg
Processed fruit and vegetable products, energy-reduced		50 mg/kg
Semi-preserved sour-sweet fruit and vegetable products		100 mg/kg
Semi-preserved sour-sweet fish, pickled fish products, crustaceans and molluscs		30 mg/kg
Dietetic fine bakery products and flour confectionery		150 mg/kg
Cereal-based snacks with edible fibre content of more than 15% or bran content of not less than 20%, energy-reduced or		50 mg/kg

	without added sugars	
	Soups, energy-reduced	50 mg/kg
	Cider and perry	20 mg/l
	Spirits with less than 15% of alcohol by volume	30 mg/kg
	Beverages containing mixture of non-alcohol drinks and beer or cider, wines, or other alcoholic beverages	30 mg/kg
	Alcohol-free beer or beer with not more than 1,2% of alcohol by volume; other beer of special types	10 mg/l
	Waffle and cones for ice cream, without added sugars	50 mg/kg
	Beer energy-reduced	10 mg/kg
	Sauces, mayonnaise, mustard, horseradish, pulp	50 mg/kg
	Dietetic products including formulae for weight control	100 mg/kg
	Food supplements:	
	-liquid	50 mg/kg
	-solid	100 mg/kg
	-vitamins and minerals in syrup and tablet form	400 mg/kg
Neotame (E961)	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products without added sugars or energy-reduced	20 mg/kg
	Water-based flavoured desserts Cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	32 mg/kg
	Ready-to-eat flavoured snacks: packed, dry,	18 mg/kg



starch- and nut-based spicy snack products	
Sweets in tablet and pastille form energy-reduced	15 mg/kg
Confectionery without added sugars	32 mg/kg
Confectionery energy-reduced or without added sugars: -starch-based -based on cocoa and dried fruits	65 mg/kg 65 mg/kg
Cocoa-based sandwich spreads Sandwich spreads based on milk products, fat products and dried fruits	32 mg/kg
Chewing gum without added sugars	250 mg/kg
Ice cream (except cream ice and milk ice cream), fruit ice energy-reduced or without added sugars	26 mg/kg
Waffle and cones for ice cream (cream ice and milk), without added sugars	60 mg/kg
Canned and pasteurized fruit energy-reduced or without added sugars	32 mg/kg
Jams, jellies, marmalades, energy reduced	32 mg/kg
Processed fruit and vegetable products, energy-reduced	32 mg/kg
Semi-preserved sour-sweet fruit and vegetable products	10 mg/kg
Sauces, mayonnaise, mustard, horseradish, pulp	12 mg/kg
Semi-preserved sour-sweet fish, pickled fish products, crustaceans and molluscs	10 mg/kg

	Cereal-based snacks with edible fibre content of more than 15% or bran content of not less than 20%, energy-reduced or without added sugars	32 mg/kg
	Soups energy-reduced	5 mg/l
	Spirits with less than 15% of alcohol by volume	20 mg/l
	Cider and perry	20 mg/l
	Beverages containing mixture of non-alcohol drinks and beer or cider (apple, pear), wines, or other alcoholic beverages	20 mg/l
	Alcohol-free beer or beer with not more than 1,2% of alcohol by volume; other beer of special types	20 mg/l
	Beer energy-reduced	1 mg/l
	Breath fresheners (in tablet and pastilles form) without added sugars	200 mg/kg
	Extra flavoured throat pastilles without added sugars	65 mg/kg
	Dietetic fine bakery products and flour confectionery	55 mg/kg
	Dietetic formulae for weight control	26 mg/kg
	Dietetic products including formulae for weight control	32 mg/kg
	Food supplements: liquid solid vitamins and minerals in syrup and chewable tablet form	20 mg/kg 60 mg/kg 185 mg/kg
	Table sweeteners	According to TI
Saccharin and its sodium, potassium, and calcium salts (E954)- used separately or in combinations in terms of saccharin	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products without added sugars or energy-reduced	80 mg/kg
	Water-based flavoured desserts Cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	100 mg/kg
	Ready-to-eat flavoured snacks: packed, dry, starch- and nut-based spicy snack products	100 mg/kg
	Confectionery without added sugars	500 mg/kg

Confectionery energy-reduced or without added sugars:	
-starch-based	300 mg/kg
-based on cocoa and dried fruits	500 mg/kg
Cocoa-based sandwich spreads Sandwich spreads based on milk products, fat products and dried fruits	200 mg/kg
Chewing gum without added sugars	1,2 g/kg
Ice cream (except cream ice and milk ice cream), fruit ice energy-reduced or without added sugars	100 mg/kg
Canned and pasteurized fruit energy-reduced or without added sugars	200 mg/kg
Jams, jellies, marmalades, energy-reduced	200 mg/kg
Processed fruit and vegetable products, energy-reduced	200 mg/kg
Semi-preserved sour-sweet fruit and vegetable products	160 mg/kg
Semi-preserved sour-sweet fish, pickled fish products, crustaceans and molluscs	160 mg/kg
Dietetic fine bakery products and flour confectionery	170 mg/kg
Cereal-based snacks with edible fibre content of more than 15% or bran content of not less than 20%, energy-reduced or without added sugars	100 mg/kg
Soups energy-reduced	110 mg/kg
Cider and perry	80 mg/l
Spirits with less than 15% of alcohol by volume	80 mg/kg

	Beverages containing mixture of non-alcohol drinks and beer or cider, wines, or other alcoholic beverages	80 mg/kg
	Alcohol-free beer or beer with not more than 1,2% of alcohol by volume; other beer of special types	80 mg/l
	Breath fresheners (in tablet and pastilles form) without added sugars	3 g/kg
	Waffle and cones for ice cream, without added sugars	800 mg/kg
	Mustard	320 mg/kg
	Sauces, mayonnaise	160 mg/kg
	Mustard, horseradish, pulp	320 mg/kg
	Dietetic products, including formulae for weight control	240 mg/kg
	Food supplements: -liquid -solid -vitamins and minerals in syrup and chewable tablets form	80 mg/kg 500 mg/kg 1.2 g/kg
Stevyol glycosides (E960), stevia leaves powder, syrup from them, and stevia extract	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products, alcoholic drinks, fine bakery products and flour confectionery, fruit fillings, fermented milk products, ice cream, canned fruit and berries, sauces	According to TD
Sucralose (E955, Trichlorogalactosucrose)	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products, without added sugars or energy-reduced	300 mg/kg
	Water-based flavoured desserts Cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	400 mg/kg

Ready-to-eat flavoured snacks: packed, dry, starch- and nut-based spicy snack products	200 mg/kg
Confectionery in tablet or pastille form energy-reduced	200 mg/kg
Confectionery without added sugars	1 g/kg
Confectionery energy-reduced or without added sugars: -starch-based -based on cocoa and dried fruits	1 g/kg 800 mg/kg
Cocoa-based sandwich spreads Sandwich spreads based on milk products, fat products and dried fruits	400 mg/kg
Chewing gum without added sugars	3 g/kg
Ice cream (except cream ice and milk ice cream), fruit ice energy-reduced or without added sugars	320 mg/kg
Waffle and cones for ice cream (cream ice and milk), without added sugars	800 mg/kg
Canned and pasteurized fruit energy-reduced or without added sugars	400 mg/kg
Jams, jellies, marmalades, energy-reduced	400 mg/kg
Processed fruit and vegetable products, energy-reduced	400 mg/kg
Semi-preserved sour-sweet fruit and vegetable products	180 mg/kg
Sauces, mayonnaise	450 mg/kg
Mustard, horseradish, pulp	320 mg/kg
Mustard	140 mg/kg
Semi-preserved sour-sweet fish, pickled	120 mg/kg

	fish products, crustaceans and molluscs	
	Cereal-based snacks with edible fibre content of more than 15% or bran content of not less than 20%, energy-reduced or without added sugars	400 mg/kg
	Soups, energy-reduced	45 mg/l
	Spirits with less than 15% of alcohol by volume	250 mg/l
	Cider and perry	50 mg/l
	Beverages containing mixture of non-alcohol drinks and beer or cider (apple, pear), wines, or other alcoholic beverages	250 mg/l
	Alcohol-free beer or beer with not more than 1,2% of alcohol by volume; other beer of special types	250 mg/l
	Beer energy-reduced	10 mg/l
	Breath fresheners (in tablet and pastilles form) without added sugars	2.4 g/kg
	Dietetic fine bakery products and flour confectionery	700 mg/kg
	Dietetic products including formulae for weight control	320 mg/kg
	Dietetic products intended for medical purposes	400 mg/kg
	Food supplements:	
	-liquid	240 mg/kg
	-solid	800 mg/kg
	-vitamins and minerals in syrup and chewable tablets form	2.4 g/kg
Thaumatococcus	Confectionery without added sugars	50 mg/kg

	Cocoa- and dried fruit-based confectionery, energy-reduced or without added sugars	50 mg/kg
	Chewing gum without added sugars	50 mg/kg
	Ice cream (except cream ice and milk ice cream), fruit ice energy-reduced or without added sugars	50 mg/kg
	Food supplements: vitamins and minerals in syrup and chewable tablet forms	400 mg/kg
Cyclamic acid and its sodium and calcium salts, cyclamates (E952)- used separately or in combinations in terms of acid	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products without added sugars or energy-reduced	250 mg/kg
	Water-based flavoured desserts Cereal-, fruit-, vegetable-, milk-, egg-, fat-based flavoured desserts without added sugars or energy-reduced	250 mg/kg
	Cocoa-based sandwich spreads Sandwich spreads based on milk products, fat products and dried fruits	500 mg/kg
	Canned and pasteurized fruit energy-reduced or without added sugars	1 g/kg
	Jams, marmalades energy-reduced	1 g/kg
	Processed fruit and vegetable products, energy-reduced	250 mg/kg
	Dietetic fine bakery products and flour confectionery	1.6 g/kg
	Beverages containing mixture of non-alcohol drinks and beer or cider, wines, or other alcoholic beverages	250 mg/kg
	Dietetic products including formulae for weight control	400 mg/kg
	Food supplements: -liquid	400 mg/kg
	-solid	500 mg/kg
	-vitamins and minerals in syrup and chewable tablets form	1,25 g/kg

Note:

<sup>1</sup>- Maximum permissible level in products of Aspartame-acesulfam salt (E962) is defined by the content of Aspartame (AS) or Potassium acesulfam (AC); in the manufacture of food products Aspartame-acesulfam salt (E962), separately or in combinations with Aspartame (E951) and/or Potassium acesulfam

(E950), maximum permissible level of separate sweeteners (E950 and/or E951) shall not exceed the content covered by the regulations.

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## HYGIENIC STANDARDS FOR THE USE OF PROPELLANTS AND PACKAGING GASES

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Nitrogen (E941) Argon (E938) Hydrogen (E949) Helium (E939) Nitrous oxide (E942) Oxygen (E948) Carbon dioxide (E290)	According to TD	According to TD
Butane (E943a) Isobutane (E943b) Propane (E944)	Vegetable oil sprays (for industrial use only) Water-based emulsions sprays	According to TD

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HYGIENIC STANDARDS FOR THE USE OF STABILISERS, EMULSIFIERS, BULKING AGENTS  
AND THICKENING AGENTS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Agar (E406)	According to TD <sup>1</sup>	According to TD
	See Annex No. 12	
Acacia gum (E414)	See Gum arabic	
Arabino galactan (E409)	According to TD <sup>1</sup>	According to TD
Alginic acid (E400) and alginates: Ammonium alginate (E403) Potassium alginate (E402) Calcium alginate (E404) Sodium alginate (E401)	According to TD <sup>1</sup>	According to TD
	See Annex No. 12	
Calcium acetate (E263)	According to TD	According to TD
	See Annexes No. 7, No. 8, No. 12	o 12
Gellan gum (E418)	According to TD <sup>1</sup>	According to TD
Soybean hemicellulose (E426)	Drinks containing milk	5 g/l
	Food supplements	1.5 g/l (kg)
	Emulsified sauces, including mayonnaise- and vegetable oil-based sauces	30 g/l
	Pre-packed fine bakery products	10 g/kg
	Pre-packed ready-to-eat East Asian noodle	10 g/kg
	Pre-packed ready-to-eat rice	10 g/kg
	Pre-packed processed potato and rice products (including chilled, frozen and dried)	10 g/kg
	Dehydrated, concentrated and frozen egg products	10 g/kg
Jelly confectionery, except jellies in mini- packagings	10 g/kg	
Guar gum (E412)	According to TD <sup>1,2</sup>	According to TD
	See Annex No. 12	
Gum arabic (E414)	According to TD <sup>1</sup>	According to TD

Diocetyl sodium sulphosuccinate (E480)	Powders for juices and desserts containing fumaric acid ,	10 mg/kg for a drink ready for consumption,  15 mg/kg for a dessert ready for consumption
Fatty acids (E570)	According to TD	According to TD
	See Annex No. 12	
Ammonium, Potassium, Calcium, Magnesium, Sodium salts of fatty acids (myristic, oleic, stearic acids and their mixtures) (E470)	See Annex No. 3 and No. 12	
Isomalt, Isomaltitol (E953)	According to TD <sup>3</sup>	According to TD
Xylitol (E967)	Food products except non-alcoholic drinks	According to TI
Lactitol (E966)		
Maltitol, Maltitol syrup (E965)	Frozen fish, crustaceans, molluscs and cephalopods	According to TI
Mannitol (E421)	Liqueurs	According to TI
Sorbitol (E420)	See Annexes No. 12 and No. 13	
Erythritol (E968)		
Carob bean gum (E410)	According to TD <sup>1,2</sup>	According to TD
	See Annex No. 12	
Cassia gum (E427)	Edible ice, fruit ice, fruit ice cream; Fermented milk products, except unflavoured, containing live starter microorganisms Milk-based desserts including ice cream and similar products Fillings, toppings and coatings for fine bakery products and desserts Cheese spreads; Sauces and seasonings for salads; Soups and broths (concentrated)	2.5 g/kg
	Heat-treated meat products	1.5 g/kg
Karaya gum (E416)	Cereal- and potato-based snacks	5 g/kg
	Nut coatings	10 g/kg
	Fillings, toppings and coatings for fine bakery products and flour confectionery	5 g/kg
	Desserts	6 g/kg
	Emulsified sauces, including mayonnaise- and vegetable oil-based sauces	10 g/kg
	Egg-based liqueurs	10 g/kg

	Chewing gum	5 g/kg
	Food supplements	According to TD
	Flavourings	50 g/kg
Potassium carbonate (E501)	According to TD	According to TD
	See Annex No. 7 and No. 12	
Carrageenan and its Ammonium, Potassium, Sodium salts, including Furcellaran (E407)	According to TD <sup>1</sup>	According to TD
Processed eucheama seaweed (E407a)	See Annex No. 12	
Quillaia extract (E999)	Non-alcoholic flavoured drinks, cider	200 mg/l in terms of water-free extract
Konjak, Konjak flour (E425), Konjak gum (E425i, Konjak glucomannan (E425ii)	According to TD <sup>1,2</sup>	10 g/kg
	See Annex No. 12	
Modified starches: Phosphated distarch phosphate (E1413) Acetylated oxidized starch (E1451) Acid treated starch (1401), Enzyme treated starch (1405), Alcaline treated starch (1402), Oxidized starch (E1404) Bleached starch (1403) Starch sodium octenyl succinate (E1450)	According to TD	According to TD
	See Annex No. 12	
Starch aluminium octenyl succinate (E1452)	Incapsulated vitamins	35 g/kg
Xanthan gum (E415)	According to TD <sup>1,2</sup>	According to TD
	See Annex No. 12	
Lecithin (E322)	According to TD	According to TD
	See Annex No. 12	
Mono- and diglycerides of fatty acids (E471)	According to TD	According to TD
	See Annex No. 12	
Soaproot extract (Acantophyllumsp) (decoction)	Confectionery	According to TD
Pectin (E440)	According to TD <sup>1</sup>	According to TD
	See Annex No. 12	
Polyvinylpyrrolidone (E1201), Polyvinylpolypyrrolidone (E1202)	See Annex No. 12	
Polydextrose (E1200)	According to TD	According to TD
	See Annex No. 12	

Dymethyl polysiloxane (E900)	See Annex No. 3 and No. 12	
Polyoxyethene sorbitan (esters of polyoxyethene sorbitan and fatty acids - polysorbates): Polyoxyethene (20) sorbitan monolaurate (E432, polysorbate 20) Polyoxyethene (20) sorbitan monooleate (E433, polysorbate 80) Polyoxyethene (20) sorbitan monopalmitate (E434, polysorbate 40) Polyoxyethene (20) sorbitan monostearate (E435, polysorbate 60) Polyoxyethene (20) sorbitan tristearate (E436, polysorbate 65) - used separately or in combinations	Milk and cream substitutes	5 g/kg
	Fat emulsions for bakery products	10 g/kg
	Ice cream (except full-cream ice, cream ice and milk ice cream), fruit ice	1 g/kg
	Desserts	3 g/kg
	Fine bakery products and flour confectionery	3 g/kg
	Sugar confectionery	1 g/kg
	Chewing gum	5 g/kg
	Emulsified sauces including mayonnaise- and vegetable oil-based sauces	5 g/kg
	Soups and broths	1 g/kg
	Dietetic products including formulae for weight control	1 g/kg
	Food supplements	According to TD
	Flavourings, except liquid smoking enhancers and paprika oleoresins-based enhancers	10 g/kg
	Food products containing flavour liquid smoking enhancers and paprika oleoresins-based enhancers	1 g/kg
	Toppings and coatings, including toppings and coatings for bakery products, non-fruit toppings, custards	3 g/kg
	Polyoxyethene (8) stearate (E430) Polyoxyethene (40) stearate (E431)	Wine
Polyethylene glycol (E1521)	Non-alcoholic drinks including drinks intended for special purposes	1 g/kg
	Chewing gum	20 g/kg
	Food supplements in capsule and tablet forms	10 g/kg
	See Annex No. 6 and No. 12	
Propylen glycol alginate (E405)	Fat emulsion products	3 g/kg
	Ice cream (except full-cream ice, cream ice and milk ice cream), edible fruit ice	3 g/kg
	Fruit and vegetables products	5 g/kg
	Sugar confectionery	1.5 g/kg
	Chewing gum	5 g/kg
	Fine bakery products and flour confectionery	2 g/kg
	Cereal- and potato-based snacks	3 g/kg
	Non-alcoholic flavoured drinks	300 mg/l
	Beer, cider	100 mg/l
	Emulsified liqueurs	10 g/kg

	Sauces	8 g/kg	
	Fillings, toppings and coatings for fine bakery products and flour confectionery and desserts	5 g/kg	
	Dietetic products including formulae for weight control	1.2 g/kg	
	Food supplements	1 g/kg	
	See Annex No. 12		
Sucroglycerids (E474) Sucrose esters of fatty acids (E473)- used separately or in combinations	Sterilised cream	5 g/kg	
	Milk-based drinks	5 g/l	
	Cream substitutes	5 g/kg	
	Heat-treated meat products	5 g/kg in terms of fat	
	Fat emulsions for fine bakery products and flour confectionery	10 g/kg	
	Ice cream (except full-cream ice, cream ice and milk ice cream), edible fruit ice	5 g/kg	
	Fresh fruit, surface treatment	According to TD	
	Sugar confectionery	5 g/kg	
	Desserts	5 g/kg	
	Beverage whiteners	20 g/kg	
	Fine bakery products and flour confectionery	10 g/kg	
	Chewing gum	10 g/kg	
	Non-alcoholic coconut-, almond- and aniseed-based drinks	5 g/kg	
	Alcoholic drinks excluding wines and beer	5 g/kg	
	Powders for preparation of hot beverages	10 g/kg	
	Sauces	10 g/kg	
	Soups and broths	2 g/kg	
	Canned liquid coffee	1 g/l	
	Food supplements	According to TD	
	Dietetic products including formulae for weight control	5 g/kg	
	See Annex No. 5 and No. 12		
	Sucrose acetate isobutyrate (E444, SAIB)	Non-alcoholic flavoured drinks, cloudy beverages	300 mg/l
Spirituos flavoured cloudy drinks with less than 15% of alcohol by volume		300 mg/l	
Glycyrrhizin extract (E958)	Confectionery	According to TD	
	Milk and cream substitutes	5 g/kg	
	Fat emulsions	10 g/kg	

Sorbitans, esters of sorbitol and fatty acids, SPANs: Sorbitan monostearate (E491, SPAN60) Sorbitan tristearate (E492, SPAN 65) Sorbitan monolaurate (E493, SPAN 20) Sorbitan monooleate (E494, SPAN 80) Sorbitan monopalmitate (E495, SPAN 40) — used separately or in combinations	Ice cream (except full-cream ice, cream ice and milk ice cream), edible fruit ice (only E492)	500 mg/kg
	Fine bakery products and flour confectionery	10 g/kg
	Sugar confectionery	5 g/kg
	Cocoa-based sweets, chocolate (only E492)	10 g/kg
	Chewing gum	5 g/kg
	Jelly marmalades (only E493)	25 mg/kg
	Desserts	5 g/kg
	Wines (only E491)	5 g/kg
	Liquid tea, fruit and herbal infusions concentrates	500 mg/kg
	Beverages whiteners	5 g/kg
	Emulsified sauces, including mayonnaise- and vegetable oil-based sauces	5 g/kg
	Fillings, toppings and coatings for fine bakery products and flour confectionery	5 g/kg
	Bakery yeast	According to TD
	Dietetic products including formulae for weight control	5 g/kg
	Food supplements	According to TD
See Annex No. 5 and No. 12		
Stearyl tartrate (E483)	Fine bakery products and flour confectionery	4 g/kg
	Desserts	5 g/kg
	See Annex No. 5	
Stearyl citrate (E484)- used separately or in combinations	Fat emulsions	10 g/kg
	Bread (special sorts)	3 g/kg
	Fine bakery products and flour confectionery	5 g/kg
	Chewing gum	2 g/kg
	Quick-cook rice	4 g/kg
	Sugar confectionery	5 g/kg
	Desserts	5 g/kg
Sodium stearoyl-2-lactylat (E481) Calcium stearoyl-2-lactylat (E482)- used separately or in combinations	Fat emulsions	10 g/kg
	Bread (special sorts)	3 g/kg
	Fine bakery products and flour confectionery	5 g/kg
	Chewing gum	2 g/kg
	Quick-cook rice	4 g/kg
	Sugar confectionery	5 g/kg
	Desserts	5 g/kg



	Cereal- and potato-based snacks	5 g/kg
	Minced and diced canned meat products	4 g/kg
	Powders for preparation of hot beverages	2 g/kg
	Emulsified liqueurs, spirits with less than 15% of alcohol by volume	8 g/kg
	Fruit mustard	2 g/kg
	Dietetic foods intended for special medical purposes, dietetic products including formulae for weight control	2 g/kg
	See Annex No. 5	
Tannins, food grade (E181)	According to TD	According to TD
	See Annex No. 11	
Tara gum (E417)	According to TD	According to TD
Sodium tartrates (E335)	According to TD	According to TD
Potassium tartrates (E336)	See Annex No. 7	
Sodium potassium tartrates (E337)		
Thermally oxidized soya bean oil interacted with mono- and diglycerides of fatty acids, TOSOM (E479)	Fat emulsions, frying oil and fat	5 g/kg
Tragacanth (E413)	According to TD	According to TD
	See Annex No. 12	
Triacetin (E1518, glyceryl triacetate)	Chewing gum	According to TD
	See Annex No. 12	
Triethyl citrate (E1505)	Powdered egg white	According to TD
	Food supplements in capsule and tablet forms	3.5 g/kg
	See Annex No. 12	
Ammonium salts of phosphatidic acid (Ammonium phosphatides) (E442)	Cocoa and chocolate	10 g/kg
	Cocoa-based sweets	10 g/kg
Orthophosphoric acid (E338) and food phosphates:	Sterilised milk	1 g/l
Ammonium phosphates (E342)	Concentrated milk with less than 28% of solids	1 g/l
Potassium phosphates (E340)	Concentrated milk with more than 28% of solids	1.5 g/l
Calcium phosphates (E341, 542)	Dried milk and dried skimmed milk	2.5 g/l
Magnesium phosphates (E343)	Pasteurised, sterilized creams	5 g/l
Sodium phosphates (E339)		
Diphosphates (E450)	Whipped creams and vegetable oil supplements	5 g/l
Triphosphates (E451)	Unripened cheese (except <i>Mozzarella</i> )	2 g/kg
Polyphosphates (E452)-phosphates added individually or in combinations in terms of P <sub>2</sub> O <sub>5</sub>	Cheese spreads and cheese spreads supplements	20 g/kg
	Chocolate and malt dairy-based drinks	2 g/kg

Soured-cream butter	2 g/kg
Spread and margarine	5 g/kg
Ice cream (except full-cream ice, cream ice and milk ice cream), edible fruit ice	1 g/kg
Desserts, including milk-based desserts (ice cream)	3 g/kg
Dry powdered dessert mixtures	7 g/kg
Fruit products, glacé fruit	800 mg/kg
Processed potato products including chilled, frozen and dried products	5 g/kg
Processed potato products including chilled, frozen and dried products and pre-fried and frozen potatoes	5 g/kg
Fine bakery products and flour confectionery	20 g/kg
Sugar confectionery	5 g/kg
Icing sugar	10 g/kg
Chewing gum	According to TD
Flour	2.5 g/kg
Dry powdered flour-based mixtures with added sugars, leaven, for cakes, pancakes, etc.	20 g/kg
Pasta (noodles)	2 g/kg
Batter	12 g/kg
Extruded corn products, snacks	5 g/kg
Dried powdered food products	10 g/kg
Food products for special purposes	5 g/kg
Meat products including sausage, except uncooked products and minced meat	5 g/kg since 1.01.2013.: 3 g/kg phosphate added per 1 kg of meat; 8 g/kg phosphate total (added + natural) per 1 kg of meat

Fillets of unprocessed fish, frozen	5 g/kg phosphate added 10 g/kg phosphate total (added + natural)
Processed and unprocessed frozen molluscs and crustaceans	5 g phosphate added per 1 kg of crustaceans 10 g phosphate total (added + natural) per 1 kg of crustaceans
Surimi	1 g/kg
Fish and crustacean paste	5 g/kg
Minced frozen fish and minced fish products	5 g phosphate added per 1 kg of fish 10 g phosphate total (added + natural) per 1 kg of fish
Canned crustacean products	1 g phosphate added per 1 kg of crustaceans
Liquid egg products (melange, white, yolk)	10 g/kg
Sauces	5 g/kg
Soups and broths (concentrated)	3 g/kg
Cloud emulsions	30 g/l
Special sport drinks, artificially carbonated non-alcoholic beverages	500 mg/l
Vegetable protein-based drinks	20 g/l
Alcoholic drinks except wine and beer	1 g/l
Instant dry tea and herbal infusions	2 g/kg
Salt and salt substitutes	10 g/kg
Toppings: syrups for pancakes, flavoured syrups for milkshakes and ice cream; similar products	3 g/kg
Glazings for meat and vegetable products	4 g/kg
Food supplements	According to TD

	Non-alcoholic flavoured drinks	700 mg/l
	Flavourings	40 g/kg
	Whey protein for sport drinks	4 g/kg
Furcellaran	See Carrageenan	
Chitosan, Chitosan hydrochloride	According to TD	According to TD
Cellulose: Microcrystalline cellulose (E460i)	According to TD	According to TD
Powdered cellulose (E460ii)	See Annexes No. 12	
Modified cellulose: Hydroxy propyl methyl cellulose (E464)		
Hydroxy propyl cellulose (E463)		
Carboxymethyl cellulose (E466)		
Sodium carboxy methyl cellulose, Cellulose gum (E466)		
Enzymically hydrolysed carboxymethylcellulose, Enzymatically hydrolyzed cellulose gum (E469)		
Methyl cellulose (E461)		
Ethyl methyl cellulose (E465)		
Ethyl hydroxyethyl cellulose (E467)		
Ethyl cellulose (E462)		
Crosslinked sodium carboxymethyl cellulose (Crosscarmellose) (E468)	Solid food supplements	30 g/kg
	See Annex No. 12	
Beta-cyclodextrin (E459)	Food products in tablet form	According to TD
	Chewing gum	20 g/kg
	Non-alcoholic flavoured drinks including drinks intended for special purposes	500 mg/kg
	Cereal-, potato- and other vegetable-based snacks	500 mg/kg
	Incapsulated flavourings used in: -flavoured tea and instant flavoured powdered drinks, ready for consumption or reconstituted in conformity with the manufacturer instructions	500 mg/kg
	-in flavoured snacks, ready for consumption or reconstituted in conformity	1 g/kg

	with the manufacturer instructions	
	See Annexes No. 6 and No. 12	
Potassium citrates (E332)	According to TD	According to TD
Calcium citrates (E333), Sodium citrates (E331)	See Annex No. 7	
Mixed acetic and tartaric acid esters of mono- and diglycerides of fatty acids (E472f)	According to TD	According to TD
Mono- and diacetyl tartaric acid esters of mono- and diglycerides of fatty acids (E472e)	See Annex No. 12	
Citric acid esters of mono- and diglycerides of fatty acids (E472c)		
Lactic acid esters of mono- and diglycerides of fatty acids (E472b)		
Acetic acid esters of mono- and diglycerides of fatty acids (E472a)		
Tartaric acid esters of mono- and diglycerides of fatty acids (E472d)		
Glycerol esters of wood rosins (E445)	Non-alcoholic flavoured cloudy drinks	100 mg/kg
	Surface treatment of citrus fruits	50 mg/kg
	Spirituos cloudy drinks	100 mg/kg
Polyglycerol esters of fatty acids (E475)	Milk and cream substitutes	5 g/kg
	Fat emulsions	5 g/kg
	Sugar confectionery	2 g/kg
	Chewing gum	5 g/kg
	Fine bakery products and flour confectionery	10 g/kg
	Desserts	2 g/kg
	Egg products	1 g/kg
	Beverages whiteners	500 mg/kg
	Emulsified liqueurs	5 g/kg
	Cereal-based snacks, granulated	10 g/kg
	Dietetic products including formulae for weight control	5 g/kg
	Food supplements	According to TD
	See Annex No. 12	
Polyglycerol esters of interesterified ricinoleic acid (E476)	Spread and margarine with a fat content of 41% or less	4 g/kg
	Seasonings and condiments	4 g/kg
	Gel-like desserts	4 g/kg

	Cocoa- and chocolate-based sugar confectionery, chocolate coating	5 g/kg
Propylene glycol esters of fatty acids (E477)	Milk and cream substitutes	5 g/kg
	Fat emulsions for fine bakery products and flour confectionery	10 g/kg
	Ice cream (except full-cream ice, cream ice and milk ice cream), edible fruit ice	3 g/kg
	Beverages whiteners	1 g/kg
	Desserts	5 g/kg
	Sugar confectionery	5 g/kg
	Fine bakery products and flour confectionery	5 g/kg
	Whipped dessert coatings, except milk and cream coatings	30 g/kg
	Dietetic products including formulae for weight control 1 g/kg	
Sucrose esters of fatty acids (E473)	See Sucroglycerides (E474)	
Esters of sorbitan and fatty acids, SPANs (E491- E495)	See Sorbitans	
Notes:		
<ol style="list-style-type: none"> <li><sup>1-</sup> For Agar (E406), Alginic acid and alginates (E400- E404), Arabinogalactan (E409), Pectins (E440), Guar gum (E412), Carob bean gum (E410), Konjak (E425, 425i, E425ii) Gum arabic (E414), Carrageenan (E407, E407a), Xantan gum (E415), Tragacanth (413), Tara gum (E417), Gellan gum (E418)- except the manufacture of jellies in mini-packs and jelly confectionery;</li> <li><sup>2-</sup> For Guar gum (E412), Carob bean gum (E410), Konjak (E425, 425i, E425ii) and Xantan gum (E415), Tara gum (E417)- shall not be used for the manufacture of dehydrated food products ready for consumption intended to rehydrate on ingestion;</li> <li><sup>3-</sup> Used not as sweeteners- for food products except non-alcoholic drinks and food products referred to in Clause 16a.</li> </ol>		

## HYGIENIC STANDARDS FOR THE USE OF FLAVOUR (SMELL) ENHANCERS

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Aspartame (E951) <sup>1</sup>	Chewing gum with sugar	2.5 g/kg
	See Annex No. 13	
Acesulfam potassium (E950) <sup>1</sup>	Chewing gum with sugar	800 mg/kg
	See Annex No. 13	
Zinc acetate (E650)	Chewing gum	1 g/kg
Glycine and its sodium salt (E640)	According to TD	According to TD
Glutamic acid (E620) and glutamates: Monoammonium glutamate (E624), Monopotassium glutamate (E622), Calcium diglutamate (E623), Magnesium diglutamate (E625), Monosodium glutamate (E621)- used separately or in combinations in terms of glutamic acid	Food products	10 g/kg
	Seasonings and condiments	According to TD
Guanylic acid (E626) Dipotassium guanylate (E628) Calcium guanylate (E629) Sodium guanylate (E627) Inosinic acid (E630) Dipotassium inosinate (E632) Calcium inosinate (E633) Disodium inosinate (E631) Calcium 5-ribonucleotydes (E634) Disodium 5-ribonucleotydes (E635)- used separately or in combinations, for guanylates and inosites – in terms of respective acid	Food products	500 mg/kg
	Seasonings and condiments	According to TD
Carbamide (E927b, urea)	Chewing gum without added sugars	30 g/kg
	See Annex No. 5	
Maltol (E636) Ethyl maltol (E637)	Flavourings	According to TD
Neohesperidine dihydrochalcone (E959) <sup>1</sup>	Chewing gum with sugar	150 mg/kg
	Spread and margarine	5 mg/kg
	Meat products	5 mg/kg
	Fruit jellies (marmalades)	5 mg/kg
	Vegetable proteins	5 mg/kg
	See Annex No. 13	

Neotame (E961)	Non-alcoholic water-based flavoured drinks, including drinks based on fruit juice, milk and milk products without added sugars or energy-reduced	2 mg/l
	Ready-to-eat flavoured spicy snacks: packed, dry starch- and nut-based (with coating) snack products	2 mg/l
	Starch-based confectionery energy-reduced or without added sugars;	3 mg/l
	Breath fresheners without added sugars	3 mg/l
	Flavoured throat pastilles without added sugars	3 mg/l
	Chewing gum with sugar	3 mg/l
	Jams, jellies and marmalades, energy-reduced	2 mg/l
	Sauces	2 mg/l
	Liquid and powdered food supplements; Food supplements: vitamins and minerals in syrup and chewable tablet forms	2 mg/l
	Thaumatococcus (E957) <sup>1</sup>	Chewing gum with added sugar
Desserts		5 mg/kg
Non-alcoholic flavoured drinks		0.5 mg/l
See Annex No. 13		

Note:

<sup>1</sup> - Use of Aspartame, Acesulfam potassium, Neohesperidine dihydrochalcone, Neotame and Thaumatococcus only as flavour (smell) enhancers; when used in combination for chewing gum production their maximum permissible level shall be reduced in proportion, i.e. the total sum (expressed in percentage of the maximum permissible level of separate substances) shall not exceed 100%.



HYGIENIC STANDARDS FOR THE USE OF  
COLOUR RETENTION AGENTS (STABILIZERS)

Food Additive (E Number)	Food Products	Maximum Permissible Level in Products
Ascorbic acid (E300) and its salts, ascorbates: Potassium ascorbate (E303) Calcium ascorbate (E302) Sodium ascorbate (E301)	According to TD See Annex No. 4 and No. 5	According to TD
Magnesium hydroxide (E528) Magnesium carbonate (E504)	According to TD See Annex No. 7	According to TD
Isoascorbic (Erythorbic) acid (E315) Sodium isoascorbate (E316)	Non-alcoholic drinks, spirits See Annex No. 4	According to TD
Potassium nitrate (E252) Sodium nitrate (E251)	See Annex No. 8	
Potassium nitrite (E249) Sodium nitrite (E250)	See Annex No. 8	
Ferrous lactate (E585) Ferrous gluconate (E579)	Olives (darkened by oxidation)	150 mg/kg in terms of Fe

FOOD PRODUCTS FOR WHICH BOTH A LIST OF FOOD ADDITIVES USED  
“ACCORDING TO TD” AND MAXIMUM PERMISSIBLE LEVELS OF THEIR USE HAVE  
BEEN ESTABLISHED

Food Products	Food Additive (E Number)	Maximum Permissible Level in Products
Cocoa and chocolate products	Citric acid (E330)	5 g/kg
	Lecithin, phosphatides (E322)	According to TD
	Tartaric acid (E334)	5 g/kg
	Glycerol (E422)	According to TD
	Mono- and diglycerides of fatty acids (E471)	According to TD
	Citric acid esters of mono- and diglycerides of fatty acids (E472c)	According to TD
	Calcium carbonate (E170)	70 g/kg on dry matter without fat in terms of Calcium carbonates
	Sodium carbonate (E500)	
	Potassium carbonate (E501)	
	Ammonium carbonate (E503)	
	Magnesium carbonate (E504)	
	Sodium hydroxide (E524)	
Potassium hydroxide (E525)		
Calcium hydroxide (E526)		
Ammonium hydroxide (E527)		
Magnesium hydroxide (E528)		
Magnesium oxide (E530)		
Fruit juices	Gum arabic (E414)	According to TD
	Pectin (E440) (only as glazing agents)	
	Citric acid (E330)	3 g/l
	Ascorbic acid (E300)	According to TD
	Malic acid (E296) – pineapple juice	3 g/l
Nectars	Pectins (E440) - pineapple juice and passionfruit juice	3 g/l
	Calcium carbonate (E170)	According to TD
	Potassium tartrate (E336) – grape juice	
Nectars	Citric acid (E330)	5 g/l
	Ascorbic acid (E300)	According to TD
	Lactic acid (E270)	5 g/l
	Pectins (E440)- for pineapple nectar and passionfruit nectar	3 g/l

Jams, jellies, marmalades and other similar spreadable products, including low-calorie products	Pectins (E440) Lactic acid (E270) Malic acid (E296) Ascorbic acid (E300) Calcium lactate (E327)	According to TD
	Citric acid (E330) Sodium citrate (E331) Calcium citrate (E333) Tartaric acid (E334) Sodium tartrate (E335) Sodium malate (E350)	
	Alginic acid (E400) Sodium alginate (E401) Potassium alginate (E402) Ammonium alginate (E403) Calcium alginate (E404) Agar (E406) Carrageenan and its Ammonium, Potassium, Sodium salts, including Furcellaran (E407) Carob bean gum(E410) Guar gum (E412) Xanthan gum (E415) Gellan gum (E418)	10 g/kg used separately or in combinations
	Mono- and diglycerides of fatty acids (E471) Calcium chloride (E509) Sodium hydroxide (E524)	According to TD
Fruit compotes	Sodium citrate (E331) Potassium citrate (E332) Pectin (E440)- except apple compote Calcium chloride (E509)	According to TD
Dried milk	Sodium ascorbate (E301) Ascorbic acid (E300) Ascorbyl palmitate (E304i) Ascorbyl stearate (E304ii) Lecithin, phosphatides (E322) Sodium citrate (E331) Potassium citrate (E332) Carrageenan and its Ammonium, Potassium, Sodium salts, including Furcellaran (E407) Sodium carbonate (E500) Potassium carbonate (E501) Calcium chloride (E509)	According to TD

Pasteurised cream	Sodium alginate (E401) Potassium alginate (E402) Carrageenan and its Ammonium, Potassium, Sodium salts, including Furcellaran (E407) Sodium Carboxymethyl cellulose (E466) Mono- and diglycerides of fatty acids (E471)	According to TD
Unprocessed frozen fruit and vegetables, ready for consumption:	Ascorbic acid (E300) Sodium ascorbate (E301)	According to TD
and pre-packed peeled potatoes	Calcium ascorbate (E302) Citric acid (E330) Malic acid (E296)- only for peeled potatoes	
Unprocessed fish, crustaceans and molluscs, including frozen	Calcium citrates (E333)	According to TD
Quick-cook rice	Mono- and diglycerides of fatty acids (E471) Esters acetic and fatty acid of glycerol (E472a)	According to TD
Non-emulsified oils and fats of animal or vegetable origin (except virgin oils and olive oils)	Ascorbyl palmitate (E304i) Ascorbyl stearate (E304ii) Tocopherols mixture concentrate (E306) Alpha-tocopherol (E307) Gamma-tocopherol (synthetic) (E308) Delta- tocopherol (synthetic) (E309)	According to TD
	Lecithin (E322)	30 g/l
	Citric acid (E330) Sodium citrate (E331) Potassium citrate (E332) Calcium citrate (E333)	According to TD
	Mono- and diglycerides of fatty acids (E471)	10 g/l
Non-emulsified oils and fats of vegetable origin (except virgin oils and olive oils) specifically intended for cooking	Lactic acid (E270) Ascorbic acid (E300) Ascorbyl palmitate (E304i) Ascorbyl stearate (E304ii) Tocopherols mixture concentrate (E306) Alpha-tocopherol (E307) Gamma-tocopherol (synthetic) (E308) Delta- tocopherol (synthetic) (E309)	According to TD
	Lecithin (E322)	30 g/l

	Citric acid (E330) Sodium citrate (E331) Potassium citrate (E332) Calcium citrate (E333)	According to TD
	Mono- and diglycerides of fatty acids (E471)	10 g/l
	Citric acid esters of mono- and diglycerides of fatty acids (E472c)	According to TD
Refined olive oil, including olive pomace oil	Alpha-tocopherol (E307)	200 mg/kg
Ripened cheese, including sliced and grated cheese	Calcium carbonate (E170) Magnesium carbonate (E504) Calcium chloride (E509) Glucono delta-lactone (E575) Cellulose (460)-only for sliced and grated ripened cheese	According to TD
	Sodium hydrocarbonate (E500ii)- only for lactic cheese	
Whey cheese	Acetic acid (E260) Lactic acid (E270) Citric acid (E330) Powdered cellulose (E460ii)- only for sliced and grated cheese Glucono delta-lactone (E575)	According to TD
Canned and pasteurized fruit and vegetables	Acetic acid (E260) Potassium acetate (E261) Sodium acetate (E262) Calcium acetate (E263) Malic acid (E296) Ascorbic acid (E300) Sodium ascorbate (E301) Calcium ascorbate (E302) Lactic acid (E270) Sodium lactate (E325) Potassium lactate (E326) Calcium lactate (E327) Citric acid (E330) Sodium citrate (E331) Potassium citrate (E332) Calcium citrate (E333) Tartaric acid (E334) Sodium tartate (E335) Potassium tartate (E336) Potassium-Sodium tartate (E337) Calcium chloride (E509) Glucono delta-lactone (E575)	According to TD
Pre-packed fresh minced meat	Potassium acetate (E261) Sodium acetate (E262) Ascorbic acid (E300) Sodium ascorbate (E301)	According to TD

	<p>Calcium ascorbate (E302)  Sodium lactate (E325)  Potassium lactate (E326)  Citric acid (E330)  Sodium citrate (E331)  Potassium citrate (E332)  Calcium citrate (E333)</p>	
Bread	<p>Acetic acid (E260)  Potassium acetate (E261)  Sodium acetate (E262)  Calcium acetate (E263)  Ascorbic acid (E300)  Sodium ascorbate (E301)  Calcium ascorbate (E302)  Ascorbyl palmitate (E304i)  Ascorbyl stearate (E304ii)  Lecithin, phosphatides (E322)  Lactic acid (E270)  Sodium lactate (E325)  Potassium lactate (E326)  Calcium lactate (E327)  Mono- and diglycerides of fatty acids (E471)  Acetic acid esters of mono- and diglycerides of fatty acids (E472a)  Tartaric acid esters of mono- and diglycerides of fatty acids (E472d)  Mono- and diacetyl tartaric acid esters of mono- and diglycerides of fatty acids (E472e)  Mixed acetic and tartaric acid esters of mono- and diglycerides of fatty acids (E472f)</p>	According to TD
Fresh pasta	<p>Lactic acid (E270)  Ascorbic acid (E300)  Sodium ascorbate (E301)  Lecithin, phosphatides (E322)  Citric acid (E330)  Tartaric acid (E334)  Mono- and diglycerides of fatty acids (E471)  Glucono delta-lactone (E575)</p>	According to TD
Soft wheat pasta	<p>Lactic acid (E270)  Ascorbic acid (E300)  Sodium ascorbate (E301)  Lecithin, phosphatides (E322)  Citric acid (E330)  Tartaric acid (E334)  Mono- and diglycerides of fatty acids (E471)  Glucono delta-lactone (E575)</p>	According to TD

	Guar gum (E412) Xanthan gum (E416)	7.5 g/kg of flour used separately or in combinations
	Dextrins (E1400)	30 g/kg of flour
	Sodium citrates (E331)	1 g/kg of flour
Beer	Lactic acid (E270) Ascorbic acid (E300) Sodium ascorbate (E301) Citric acid (E330) Gum arabic (E414)	According to TD
Soured-cream butter	Sodium carbonates (E500)	According to TD
Ultra-heat-treated goat milk	Sodium citrates (E331)	4 g/l
Chestnuts in syrup	Carob bean gum (E410) Guar gum (E412) Xanthan gum (E415)	According to TD
Unflavoured fermented cream products containing live starter microorganisms or their analogues with a fat content less than 20%	Agar (E406) Carrageenan (E407) Carob bean gum (E410) Guar gum (E412) Xanthan gum (E415) Pectins (E440) Cellulose (E460) Carboxymethyl cellulose (E466) Mono- and diglycerides of fatty acids (E471) Oxidized starch (E1404) Monostarch phosphate (E1410) Distarch phosphate (E1412) Phosphated distarch phosphate, cross-linked (E1413) Acetylated distarch phosphate (E1414) Acetylated starch (E1420) Acetylated distarch adipate (E1422) Hydroxy propyl starch (E1440) Hydroxy propyl distarch phosphate (E1442) Starch sodium octenyl succinate (E1450) Acetylated oxidized starch (E1451)	According to TD

## ANNEX No. 19

## LIST OF CHEMICAL FLAVOURING SUBSTANCES ALLOWED FOR MANUFACTURING OF EDIBLE FLAVOURINGS

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
01.001	2633	491	138-86-3	Limonene	1,8(9)-p-Menthadiene; p-Mentha-1,8- diene; 1-Methyl-4-isopropenyl-1- cyclohexene; Dipentene; Carvene; Cinene; Citrene;
01.002	2356	620	99-87-6	1-Isopropyl-4-methylbenzene	p-Cymene; Cymene; p-methyl- isopropylbenzene; 4-isopropyl-1- methylbenzene; Cymol; 4-Methyl-1-isopropylbenzene; 1-Methyl-4- isopropylbenzene;
01.003	2903	2114	127-91-3	Pin-2(10)-ene	beta-Pinene; 6,6-Dimethyl-2-methylenebicyclo[3.1.1]heptane
01.004	2902	2113	80-56-8	Pin-2(3)-ene	alpha-Pinene; 2,6,6-Trimethyl- bicyclo[3.1.1]hept-2-ene
01.005	3046	2115	586-62-9	Terpinolene	p-Menth-1,4(8)-diene; 1-Methyl-4- isopropylidene-1-cyclohexene; 1,4(8)- Terpadiene; p-Mentha-1,4(8)-diene
01.006	2856	2117	99-83-2	alpha-Phellandrene	Phellandrene; 2-Methyl-5-isopropyl- 1,3-cyclohexadiene; 4-isopropyl-1- methyl-1,5-cyclohexadiene; p-Mentha- 1,5-diene



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
01.007	2252	2118	87-44-5	beta-Caryophyllene	Caryophyllene; 2-Methylene-6,10,10-trimethylbicyclo-[7,2,0]-undec-5-ene; 4,11,11-Trimethyl-8-methylene- bicyclo[7.2.0]undec-4(trans)-ene
01.008	2762	2197	123-35-3	Myrcene	7-Methyl-3-methylene-1,6-octadiene; 7-Methyl-3-methyleneocta-1,6-diene
01.009	2229	2227	79-92-5	Camphene	3,3- Dimethyl-2- methylenenorcamphene; 2,2-Dimethyl-3-methylenenorbornane;
01.010	3144	2260	1195-32-0	1-Isopropenyl-4-methylbenzene	4,alpha-Dimethylstyrene; p- Isopropenyl toluene; 1-Methyl-4- isopropenyl benzene; 2-p-tolyl propene;
01.011	3186	2292	644-08-6	4-Methyl-1,1'-biphenyl	p-Methyldiphenyl; p- Methylphenylbenzene; Phenyl-p-tolyl; p-Phenyl-toluene;
01.013	3129	10978	92-52-4	Biphenyl	Diphenyl; Phenylbenzene;
01.014	3193	11009	90-12-0	1-Methylnaphthalene	alpha-Methylnaphthalene;
01.015	3233	11022	100-42-5	Vinylbenzene	Styrene; Vinylbenzol; Phenylethene; Phenylethylene;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
01.016	3331	10979	495-62-5	1,4(8),12-Bisabolatriene	gamma Bisabolene; gamma- Bisabolene; 1-Methyl-4-(1,5-dimethyl- 1,4-hexadienyl)-1-cyclohexene; 6-Methyl-2-(4-methylcyclohex-3- enylidene)hept-5-ene
01.017	3443	11030	4630-07-3	Valencene	1,2,3,5,6,7,8a-Octahydro-1,8a- dimethyl-7-isopropenyl naphthalene; 1,2-Dimethyl-9-isopropylene- bicyclo[4.4.0]dec-5-ene
01.018	3539	11015	13877-91-3	beta-Ocimene	trans-beta-ocimene; 1,3,6-octatriene, 3,7-dimethyl-; 3,7-Dimethylocta- 1,3(trans),6-triene
01.019	3558	11023	99-86-5	alpha-Terpinene	1-Methyl-4-isopropyl-1,3- cyclohexadiene; p-Mentha-1,3-diene
01.020	3559	11025	99-85-4	gamma-Terpinene	1-Methyl-4-isopropyl-1,4- cyclohexadiene; Moslene; Crithmene; p-Mentha-1,4-diene
01.021		10982	29350-73-0	delta-Cadinene	alpha-, beta-, gamma, epsilon, delta- Cadiene; 2,3,4,7,8,10-hexahydro-1,6- dimethyl-4-isopropyl-naphthalene
01.022		10985	469-61-4	alpha-Cedrene	2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undec-8-ene

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
01.023		11003	3691-12-1	1(5),11-Guaiadiene	1,4-Dimethyl-7-isopropenyl-delta- 9,10-octahydroazulene; alpha- Guaiene; 2,8-Dimethyl-5-isopropenyl- bicyclo[5.3.0] dec-1(7)-ene
01.024		11931	5208-59-3	beta-Bourbonene	2-Methyl-8-methylene-5-isopropyl-tricyclo[5.3.0.0(2.6)]decane
01.029	3821	10983	13466-78-9	delta-3-Carene	3-Carene; Isodiprene; d-3-Carene; Car- 3-ene; 4,7,7-Trimethyl-3-norcarene; 3,7,7-Trimethylbicyclo[4,1,0]hept-3- ene; 3,7,7-trimethyl-bicyclo-[4.1.0] hept-3-ene
01.030		10989	13744-15-5	beta-Cubebene	10-Methyl-4-methylene-7-isopropyl-tricyclo[4.4.0.0(1.5)]decane
01.036		11847	101-81-5	Diphenylmethane	Benzylbenzene; Phenylbenzyl; 1,1'- methylenebis-benzene;
01.037		10992	112-41-4	Dodec-1-ene	1-Dodecene; Dodecylene;
01.039		10996	20307-84-0	delta-Elemene	3-Isopropenyl-1-isopropyl-4-methyl-4-vinylcyclohex- 1-ene
01.040	3839	10998	502-61-4	alpha-Farnesene	1,3,6,10-Dodecatetraene, 3,7,11- trimethyl (alpha-isomer); 3,7,11- Trimethyldodeca-1,3,6,10-tetraene

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
01.041	3839	10999	18794-84-8	beta-Farnesene	3,7,11-Trimethyl-1,3,6,10- dodecatetraene; 2,6,10-Trimethyl-2,6,9,11- dodecatetrene; 7,11-Dimethyl-3-methylene-1,6,10-dodecatriene
01.043		11004	6753-98-6	3,7,10-Humulatriene	alpha-Humulene; alpha- Caryophyllene; 1,5,5,8-Tetramethylcycloundeca-3,7,10-triene
01.045	2633	491	5989-27-5	d-Limonene	p-Mentha-1,8-diene
01.046	2633	491	5989-54-8	l-Limonene	Levo-Limonene;
01.051		11010	91-57-6	2-Methylnaphthalene	Beta-methyl naphtalenes; beta- methylnaphthalene;
01.052		11011	10208-80-7	alpha-Murolene	2,8-Dimethylene-5-isopropyl-bicyclo[4.4.0]decane
01.053		11014	91-20-3	Naphthalene	Naphthene; Champhor tar;
01.055		11017	555-10-2	beta-Phellandrene	p-Mentha-1(7),2-diene
01.059		11018	3387-41-5	4(10)-Thujene	4-Methylene-1-isopropyl-bicyclo[3.1.0]hexane
01.061	3795		16356-11-9	Undeca-1,3,5-triene	
01.065	2856	2117	4221-98-1	(R)-5-(1-Methylethyl)-2-methyl-1,3-cyclohexadiene	
01.070	4293		111-66-0	1-Octene	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.001	2179	49	78-83-1	2-Methylpropan-1-ol	Isobutanol; Isopropyl carbinol;
02.002	2928	50	71-23-8	Propan-1-ol	Propylic alcohol;
02.003	2057	51	123-51-3	Isopentanol	Isoamyl alcohol; Isopentyl alcohol; Amyl iso alcohol; 3-Methyl-1-butanol; Pentyl iso alcohol; Isobutyl carbinol; 3- Methylbutan-1-ol
02.004	2178	52	71-36-3	Butan-1-ol	Propyl carbinol; Hydroxybutane; Butyric alcohol;
02.005	2567	53	111-27-3	Hexan-1-ol	Alcohol C-6; n-Hexyl alcohol; Caproic alcohol; Amyl carbinol; n- Hexanol;
02.006	2800	54	111-87-5	Octan-1-ol	Alcohol C-8; n-Octyl alcohol; Heptyl carbinol; Caprylic alcohol; Capryl alcohol; pri.-Octyl alcohol;
02.007	2789	55	143-08-8	Nonan-1-ol	Alcohol C-9; Pelargonic alcohol; Nonanol; Octyl carbinol; Pelargonic alcohol; n-Nonyl alcohol;
02.008	2617	56	112-53-8	Dodecan-1-ol	Alcohol C-12; Lauryl alcohol; Lauric alcohol; Dodecyl alcohol; 1- Dodecanol; Undecyl carbinol;
02.009	2554	57	36653-82-4	Hexadecan-1-ol	Cetyl alcohol; Alcohol C-16; n- hexadecyl alcohol; Palmityl alcohol;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.010	2137	58	100-51-6	Benzyl alcohol	alpha-Hydroxytoluene; Phenyl carbinol; Phenylmethanol; Phenylmethyl alcohol;
02.011	2309	59	106-22-9	Citronellol	3,7-Dimethyloct-6-en-1-ol
02.012	2507	60	106-24-1	Geraniol	2,6-Dimethyl-2,6-octadien-8-ol; trans-3,7-Dimethyl-2,6-octadien-1-ol; 3,7-Dimethylocta-2(trans),6-dien-1-ol
02.013	2635	61	78-70-6	Linalool	2,6-Dimethyl-octadien-2,7-ol-6; 2,6- Dimethyl-2,7-octadien-6-ol; Linalol; Licareol; Coriandrol; 3,7-Dimethylocta-1,6-dien-3-ol
02.014	3045	62	98-55-5	alpha-Terpineol	alpha-Terpineol; 1-Methyl-4-isopropyl 1-cyclohexen-8-ol; alpha-Terpilenol; Terpineol schlechthin.; p-Menth-1-en- 8-ol
02.015	2665	63	89-78-1	Menthol	2-Isopropyl-5-methylcyclohexanol; Hexahydrothymol; 5-Methyl-2-isopropylhexahydrophenol; 5-Methyl- 2-isopropylcyclohexanol; cis(1,3)- trans(1,4)-Menthan-3-ol

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.016	2157	64	507-70-0	Borneol	Camphol; Baros; d-Camphanol; 2-Hydroxycamphane; 2-Camphanol; Bornyl alcohol; Borneocamphor; 1,7,7- Trimethyl-bicyclo[2.2.1]heptan-2-ol
02.017	2294	65	104-54-1	Cinnamyl alcohol	Cinnamic alcohol; gamma-Phenylallyl alcohol; 3-Phenyl-2-propen-1-ol; 2- Propen-1-ol,-3-phenyl; 3-Phenylprop- 2-enol
02.018	2772	67	7212-44-4	Nerolidol	3,7,11- Trimethyl-1,6,10-dodecatrien- 3-ol; Peruvicol; Dodecatrien; Melaleucol; 3,7,11-Trimethyl- 1,6(cis),10-dodecatrien-3-ol
02.019	2858	68	60-12-8	2-Phenylethan-1-ol	Phenethyl alcohol; beta-Phenethyl alcohol; 1-Phenyl-2-ethanol; 2- Phenylethyl alcohol; Benzyl carbinol;
02.020	2562	69	2305-21-7	Hex-2-en-1-ol	2-Hexenol; 3-Propylallyl alcohol;
02.021	2548	70	111-70-6	Heptan-1-ol	Heptyl alcohol; Alcohol C-7; Hydroxyheptane; Enanthyl alcohol; Enanthic alcohol; pri.Heptyl alcohol; Hexyl carbinol; Hydroxyheptane;
02.022	2801	71	123-96-6	Octan-2-ol	Octyl alcohol sec.; Methyl hexyl carbinol; Capryl alcohol sec.; Hexyl methyl carbinol;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.023	2805	72	3391-86-4	Oct-1-en-3-ol	Amyl vinyl carbinol; (Amylvinylcarbinol); Matsutake alcohol; Matsuka alcohol; n-Pentyl vinyl carbinol;
02.024	2365	73	112-30-1	Decan-1-ol	Alcohol C-10; n-Decyl alcohol; Nonylacarbinol; Decylic alcohol; Capric alcohol;
02.026	2391	75	106-21-8	3,7-Dimethyloctan-1-ol	Tetrahydrogeraniol; Dihydrocitronellol;
02.027	2980	76	6812-78-8	Rhodinol	alpha-Citronellol; 2,6-Dimethyl-1- octen-8-ol; 3,7-Dimethyloct-7-en-1-ol
02.028	3060	77	78-69-3	3,7-Dimethyloctan-3-ol	Tetrahydrolinalool; Tetrahydrolinalol; 1-Ethyl-1,5-dimethyl hexanol;
02.029	2478	78	4602-84-0	3,7,11-Trimethyldodeca-2,6,10-trien-1-ol	Farnesol; 2,6,10-Trimethyl-2,6,10- dodecatrien-12-ol;
02.030	2065	79	101-85-9	alpha-Pentylcinnamyl alcohol	n-Amyl cinnamic alcohol; 2-Amyl-3- phenyl-2-propen-1-ol; 2-Benzylidene- heptanol; 2-Pentyl-3-phenylprop-2- enol
02.031	2885	80	122-97-4	3-Phenylpropan-1-ol	Benzylethyl alcohol; Hydrocinnamyl alcohol; Phenylpropyl alcohol; Dihydrocinnamyl alcohol;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.033	2884	82	93-54-9	1-Phenylpropan-1-ol	Phenyl ethyl carbinol; 1-Phenylpropyl alcohol; alpha-Ethylbenzyl alcohol; Ethyl phenyl carbinol;
02.034	2953	83	705-73-7	1-Phenylpentan-2-ol	alpha-Propylphenethyl alcohol; Benzyl propyl carbinol; Benzylbutyl alcohol; Benzylpropyl carbinol; n- Propyl benzyl carbinol;
02.035	2393	84	100-86-7	2-Methyl-1-phenylpropan-2-ol	2-Benzyl-2-propanol; 2-Hydroxy-2- methyl-1-phenylpropanone; Benzyl dimethyl carbinol;
02.036	2879	85	2344-70-9	4-Phenylbutan-2-ol	Phenylethyl methyl carbinol; Methyl 2- phenylethyl carbinol;
02.037	2883	86	10415-87-9	3-Methyl-1-phenylpentan-3-ol	Phenylethyl methyl ethyl carbinol; 3- Methyl-1-phenyl-3-pentanol;
02.038	2480	87	1632-73-1	Fenchyl alcohol	2-Fenchanol; alpha-Fenchol; 1,3,3- Trimethyl-2-norbornanol; 1,3,3- Trimethylbicyclo-2,2,1-heptan-2-ol; 1,3,3-trimethyl-bicyclo{2.2.1}heptan-2' ol
02.039	2933	88	536-60-7	4-Isopropylbenzyl alcohol	Cuminol; p-Cymen-7-ol; Cuminy alcohol; Cuminic alcohol; p-Cymen-7- ol;
02.040	2056	514	71-41-0	Pentan-1-ol	Amyl alcohol; Pentyl alcohol; n-Butyl carbinol;
02.041		515	75-85-4	2-Methylbutan-2-ol	t-Amylalcohol;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.042	3242	530	1197-01-9	2-(4-Methylphenyl)propan-2-ol	p-Cymen-8-ol; p-alpha-alpha- Trimethylbenzyl alcohol; 2-p-Tolyl-2- propanol; 8-Hydroxy p-cymene; Dimethyl p-Tolyl carbinol;
02.043		543	97-95-0	2-Ethylbutan-1-ol	
02.044	3547	544	589-82-2	Heptan-3-ol	n-Butyl ethyl carbinol; Ethyl butyl carbinol;
02.045	3288	554	543-49-7	Heptan-2-ol	2-Hydroxyheptane; Amyl methyl carbinol; sec-Heptyl alcohol; Methyl amyl carbinol;
02.047	2586	559	107-74-4	3,7-Dimethyloctane-1,7-diol	Hydroxycitronellol; 7-Hydroxy-3,7-dimethyloctan-1-ol; Hydroxydihydrocitronellol;
02.049	2780	589	7786-44-9	Nona-2,6-dien-1-ol	Nonadienol; Violet leaf alcohol;
02.050		665	20273-24-9	Pent-2-en-1-ol	
02.051	3618	674	10521-91-2	5-Phenylpentan-1-ol	Phenylamyl alcohol;
02.052		698	75-65-0	2-Methylpropan-2-ol	1,1-Dimethylethanol; tert. Butanol; 1,1-Dimethyl ethanol
02.054		701	80-53-5	p-Menthane-1,8-diol	Terpin hydrate; 4-Hydroxy- alpha,alpha,4-trimethyl cyclohexane methanol; dipentene glycol,;
02.055	3324	702	3452-97-9	3,5,5-Trimethylhexan-1-ol	Trimethylhexyl alcohol; Isononanol;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.056	2563	750	928-96-1	Hex-3(cis)-en-1-ol	Leaf alcohol; beta-gamma-hexenol; cis-3-hexenol; Blatteralkohol; Hex-3- en-1-ol;
02.057	3097	751	112-42-5	Undecan-1-ol	Alcohol C-11, undecylic; Undecyl alcohol; Decyl carbinol; 1- Hendecanol;
02.058	2770	2018	106-25-2	Nerol	Nerolol; Neraniol; Nerosol; Cis-3,7- Dimethyl-2,6,octadien-1-ol; Allerol; cis-2,6-Dimethyl-2,6-octadien-8-ol; Nerodol; Neraniol; 3,7-Dimethyl-2(cis),6-octadien-1-ol
02.059	2158	2020	124-76-5	Isoborneol	Isocamphol; Borneol(iso); (iso)- Camphol; Isobornyl alcohol; (exo)-2- Camphanol; (exo)-2-Bornanol; Bornan-2-ol; 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-ol
02.060	2664	2024	536-59-4	p-Mentha-1,8-dien-7-ol	Perilla alcohol; Perillyl alcohol; 1- Hydroxymethyl-4-isopropenyl-1- cyclohexene; Dihydrocuminic alcohol;
02.061	2379	2025	619-01-2	Dihydrocarveol	8-p-Menthen-2-ol; 6-Methyl-3-isopropenylcyclohexanol; p-Menth-8- en-2-ol
02.062	2247	2027	99-48-9	Carveol	p-Mentha-6,8-dien-2-ol; 1-Methyl-4- isopropenyl-6-cyclohexen-2-ol; p- Mentha-1,8-dien-2-ol

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.063	2666	2028	2216-52-6	d-Neomenthol	2-Propyl-iso-5-Methylcyclohexanol; 2- Isopropyl-5-methylcyclohexanol; 2- Isopropyl-5-methylcyclohexanol [ 1S- (1alpha,2alpha,5beta)]-
02.064	2685	2030	98-85-1	1-Phenylethan-1-ol	alpha-Methylbenzyl alcohol; Methyl phenyl carbinol; Methylphenyl carbinol; Styrallyl alcohol; 1-Phenyl-1- hydroxyethane;
02.065	2208	2031	7779-78-4	4-Methyl-1-phenylpentan-2-ol	Benzyl isobutyl carbinol; alpha- Isobutylphenethyl alcohol; 2- Methylpropyl benzyl carbinol; 4-Methyl-1-phenyl-2-pentanol;
02.066	2880	2032	17488-65-2	4-Phenylbut-3-en-2-ol	Methyl styryl carbinol; alpha- Methylcinnamyl alcohol;
02.067	2962	2033	89-79-2	Isopulegol	1-Methyl-4-isopropenylcyclohexan-3- ol; p-Menth-8(9)-en-3-ol; p-Menth-8- en-3-ol
02.070		2138	108-93-0	Cyclohexanol	Hexalin; Hexahydrophenol; Hydroxy cyclohexane;
02.071	3562	2228	499-69-4	p-Menthan-2-ol	Hexahydrocarvacrol; 3-Isopropyl-6-methylcyclohexanol; Carvomenthol; 1- Methyl-4-isopropyl-2-cyclohexanol;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.072	2248	2229	562-74-3	4-Terpinenol	4-Carvomenthenol; 1-Methyl-4- isopropylcyclohex-1-en-4-ol; 1-p- Menthen-4-ol; Origanol; 1-Methyl-4- isopropyl; p- Menth-1-en-4-ol
02.073	2732	2257	1123-85-9	2-Phenylpropan-1-ol	Hydratropic alcohol; Hydratropyl alcohol; 2-Phenylpropyl alcohol;
02.074	3430	2295	6126-50-7	Hex-4-en-1-ol	
02.075		2296	18675-34-8	neo-Dihydrocarveol	p-Menth-8-en-2-ol
02.076	3998	2346	137-32-6	2-Methylbutan-1-ol	
02.077		2349	584-02-1	Pentan-3-ol	Diethyl carbinol;
02.078	2419	11891	64-17-5	Ethanol	Methyl carbinol; Punctilious (USI); Absolute alc.; Anhydrous alc.; Dehydrated alc.; Ethyl hydrate; Ethyl hydroxide;
02.079	2929		67-63-0	Isopropanol	Isopropyl alcohol; Propan-2-ol; Isopropanol; Dimethyl carbinol; Propyl iso alcohol; Propanol(iso); Petrohol; sec-Propyl alcohol;
02.080	3139	10197	536-50-5	1-(p-Tolyl)ethan-1-ol	p-alpha-Dimethylbenzyl alcohol; p- Tolyl methyl carbinol; 1-p-Tolyl-1- ethanol; 4-Toluene; p-Tolyl methyl carbinol; 1-(4-Methylphenyl)ethan-1- ol
02.081	3140	11719	108-82-7	2,6-Dimethylheptan-4-ol	Di-isobutyl carbinol; Diisobutyl carbinol,;
02.082	3151	11763	104-76-7	2-Ethylhexan-1-ol	2-Ethylhexyl alcohol;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.083	3179	10248	491-04-3	p-Menth-1-en-3-ol	Piperitol;
02.085	3239	10309	546-79-2	Sabinene hydrate	Sabinenehydrate; Thujan-4-ol; 1- Isopropyl-4-methylbicyclo[3.1.0]hexan-4-ol
02.086	3246	11826	1653-30-1	Undecan-2-ol	sec-Undecylic alcohol; Methyl nonyl carbinol;
02.087	3315	11803	628-99-9	Nonan-2-ol	Methyl-n-Heptyl carbinol; sec-n- Nonanol; Methyl heptyl carbinol;
02.088	3316	11696	6032-29-7	Pentan-2-ol	sec-Amyl alcohol; alpha-Methyl butanol; Methyl n-propyl carbinol; Methyl n-Propyl carbinol; Propyl methyl carbinol;
02.089	3351	11775	623-37-0	Hexan-3-ol	Ethyl propyl carbinol;
02.090	3379	10292	31502-14-4	Non-2(trans)-en-1-ol	
02.091	3439	10285	515-00-4	Myrtenol	6,6-Dimethyl-2-oxomethylbicyclo[1,3,3]-hept-2-ene; 10-Hydroxy-2-pinene; 2-pinen-10-ol; 2-Hydroxymethyl-6,6-dimethyl- bicyclo[3.1.1]hept-2-ene
02.092	3446	10195	57069-86-0	Dehydrodihydroionol	alpha,2,6,6-Tetramethyl-1,3- cyclohexadien-1-propanol; 4-(2,6,6- Trimethyl-1,3-cyclohexadienyl)-butan- 2-ol
02.093	3465	10294	35854-86-5	Non-6-en-1-ol	Cis-6-Nonenol;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.094	3467	10296	20125-84-2	Oct-3-en-1-ol	cis-3-Octenol;
02.095	3491	10208	18368-91-7	2-Ethylfenchol	2-Ethyl-1,3,3-trimethyl-2- norbornanol; 2-Ethyl-1,3,3-trimethyl- bicyclo[2.2.1]heptan-2-ol
02.096	3563	10252	586-82-3	1-Terpinenol	4-Isopropyl-1-methyl-3-cyclohexen-1- ol; 1-Methyl-4-isopropyl-3- cyclohexen-1-ol; p-Menthen-1-ol, p-3- Methenol-1; p-Menth-3-en-1-ol
02.097	3564	10254	138-87-4	beta-Terpineol	1-Methyl-4-isopropenylcyclohexan-1- ol; 4-Isopropenyl-1-methyl-1- cyclohexanol; p-Menth-8(10)-en-1-ol
02.098	3581	11715	589-98-0	Octan-3-ol	Ethyl n-amyl carbinol; amylethylcarbinol; d-n-octanol; Amyl ethyl carbinol;
02.099	3584	11717	616-25-1	Pent-1-en-3-ol	B-Pentenol; Vinyl ethyl carbinol; Ethyl vinyl carbinol;
02.100	3587	10303	5947-36-4	Pinocarveol	2(10)-Pinen-3-ol; 6,6-Dimethyl-3- hydroxy-2-methylenebicyclo[3.1.1]- heptane; 2(10)-Pinenol-3; 3-Hydroxy- 6,6-dimethyl-2-methylene-bicyclo[3.1.1]heptane

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.101	3594	10304	473-67-6	Pin-2-en-4-ol	Verbenol; 4-Hydroxy-2,6,6-trimethylbicyclo[3.1.1]hept-2-ene; d- Verbenol; 2-Pinenol-4; 4,6,6- Trimethyl-bicyclo[3.1.1]hept-3-en-2- one
02.102	3602		76649-14-4	Oct-3-en-2-ol	trans-3-Octen-2-ol;
02.103	3605	10194	1565-81-7	Decan-3-ol	Heptyl ethyl carbinol; Ethyl heptyl carbinol;
02.104	3608	10220	4798-44-1	Hex-1-en-3-ol	1-Vinyl butan-1-ol; Vinyl propyl carbinol; Propyl vinyl carbinol;
02.105	3624		25312-34-9	4-(2,6,6-Trimethyl-2-cyclohexenyl)but-3-en-2-ol	alpha-Ionol;
02.106	3625		22029-76-1	4-(2,2,6-Trimethyl-1-cyclohexenyl)but-3-en-2-ol	beta-Ionol;
02.107	3627		3293-47-8	Dihydro-beta-ionol	β-Dihydroionol; 4-(2,2,6- Trimethylcyclohex- 1-enyl)-butan-2-ol
02.108	3629	10281	103-05-9	2-Methyl-4-phenylbutan-2-ol	Phenylethyl dimethyl carbinol; 1,1- Dimethyl-3-phenyl-1-propanol; Dimethyl phenylethyl carbinol;
02.109	3647	11795	556-82-1	3-Methylbut-2-en-1-ol	Prenol;
02.110	3663		36806-46-9	2,6-Dimethylhept-6-en-1-ol	
02.111	3703		598-75-4	3-Methylbutan-2-ol	Methyl isopropyl carbinol; Isopropyl methyl carbinol;



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.112	3720	10292	41453-56-9	Non-2(cis)-en-1-ol	z-2-Nonen-1-ol;
02.113	3722		64275-73-6	Oct-5(cis)-en-1-ol	z-5-Octen-1-ol;
02.114	3741		1901-38-8	2-(2,2,3-Trimethylcyclopent-3-enyl)ethan-1-ol	alpha- Campholenic alcohol; 2-(2,3,3-trimethylcyclopent-3-en-1-yl)ethanol;
02.115	3762	10275	589-35-5	3-Methylpentan-1-ol	2-Ethyl-4-butanol;
02.119		10189	28231-03-0	Cedrenol	2,6,6-Trimethyl-tricyclo[5.3.1.0(1.5)]undec-8-en-8-yl methanol
02.120		10190	77-53-2	Cedrol	Cedarwood oil alcohols; Octahydro-3,6,8,8-tetramethyl-1H-3a,7- methanoazulen-6-ol; 8BH-cedran-8-ol; 2,6,8,8-Tetramethyl- tricyclo[5.3.1.0(1.5)]undecan-8-ol
02.121		11735	78-92-2	Butan-2-ol	2-Hydroxybutane; Butylene hydrate; Methyl Ethyl carbinol; sec-Butyl Alcohol;
02.122		10239	3269-90-7	p-Mentha-1,8(10)-dien-9-ol	p-Mentha-1,8-dien-10-ol;
02.123		11794	115-18-4	2-Methylbut-3-en-2-ol	
02.124		10264	1569-60-4	6-Methylhept-5-en-2-ol	
02.125		10319	112-43-6	Undec-10-en-1-ol	Undecen-1-ol; Alcohol C-11; Undecylenic alcohol;
02.126		10314	112-72-1	Tetradecan-1-ol	Myristic alcohol; Myristyl alcohol; Alcohol C-14;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.128	2099	66	105-13-5	p-Anisyl alcohol	Anisic alcohol; Anise alcohol; 4- Methoxybenzyl alcohol
02.133		10181	513-85-9	Butane-2,3-diol	2,3- Butylene glycol; Dimethyl ethylene glycol;
02.135		10193	96-41-3	Cyclopentanol	Cyclopentyl alcohol;
02.136	3824		51100-54-0	Dec-1-en-3-ol	
02.137		11750	22104-80-9	Dec-2-en-1-ol	
02.139	3911	11748	18409-21-7	Deca-2,4-dien-1-ol	
02.141	3938		128-50-7	2-(6,6Dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethan-1-ol	Nopol; 6,6-Dimethyl-2-norpinene-2- ethanol; 2-Hydroxyethyl-6,6-dimethyl- bicyclo[3,1,1] -hept-2-ene;
02.146	3830	10202	29957-43-5	3,7-Dimethylocta-1,5,7-trien-3-ol	
02.148		11760	10203-28-8	Dodecan-2-ol	
02.149		10205	639-99-6	Elemol	2-(4-Methyl-3-isopropylene-4- vinylcyclohexyl) propan-2-ol
02.152		10219	10606-47-0	Hept-3-en-1-ol	
02.153	4127		33467-79-7	2,4- Heptadien- 1- ol, (2E, 4E) -	Trans- 2- trans- 4- heptadien- 1- ol, 2,4- Heptadien-1- ol, (E, E) -; (2E, 4E)- Heptadienol; (E, E)- Hepta-2,4- dien- 1- ol
02.155	4129	10218	4938-52-7	1-Hepten-3-ol	
02.156	3924	69	928-94-9	Hex-2(cis)-en-1-ol	2- Hexenol;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.157	2562	69	2305-21-7	Hex-2(trans)-en-1-ol	2- Hexenol;
02.159	2563	750	544-12-7	Hex-3-en-1-ol	Leaf alcohol; beta-gamma-hexenol; cis-3-hexenol;
02.162	3922		111-28-4	Hexa-2,4-dien-1-ol	Sorbic alcohol; 1-Hydroxy-2,4- hexadiene; Sorbyl alcohol;
02.165	3987		623-05-2	4-Hydroxybenzyl alcohol	(4-Hydroxyphenyl) methanol; p- (Hydroxymethyl) phenol; p- Hydroxybenzyl alcohol; 4- Hydroxybenzene methanol;
02.166		10226	501-94-0	2-(4-Hydroxyphenyl)ethan-1-ol	4-Hydroxyphenethyl alcohol; 4- Hydroxybenzeneethanol;
02.168		10233	505-32-8	Isophytol	3,7,11,15- Tetramethylhexadec-1-en-3- ol
02.174	4178	10258	4675-87-0	2-Methylbut-2-en-1-ol	
02.175		10259	4516-90-9	2-Methylbut-3-en-1-ol	
02.176		10260	763-32-6	3-Methylbut-3-en-1-ol	
02.177		10266	617-29-8	2-Methylhexan-3-ol	
02.180		10278	626-89-1	4-Methylpentan-1-ol	Isohexanol;
02.181		10274	590-36-3	2-Methylpentan-2-ol	2-Methyl-2-pentanol;
02.182		10276	565-60-6	3-Methylpentan-2-ol	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
02.183		10279	108-11-2	4-Methylpentan-2-ol	Methylamyl alcohol; sec-Hexyl alcohol; Methyl isobutyl carbinol;
02.184		10277	77-74-7	3-Methylpentan-3-ol	
02.187		10291	21964-44-3	Non-1-en-3-ol	n-Hexyl vinyl carbinol;
02.188	3951	11802	62488-56-6	Nona-2,4-dien-1-ol	
02.189	3885	10289	76649-25-7	Nona-3,6-dien-1-ol	
02.190		10290	624-51-1	Nonan-3-ol	Hexyl ethyl carbinol; 3-Nonanol; Ethyl n-Hexyl carbinol;
02.192	3887	11804	22104-78-5	Oct-2-en-1-ol	
02.193	3888		4798-61-2	Oct-2-en-4-ol	2-Octen-4-ol;
02.197		10173	41199-19-3	1,2,3,4,4a,5,6,7-Octahydro-2,5,5-trimethylnaphthalen-2-ol	Ambrinol; 2,5,5- Trimethyl-2- hydroxyoctalin;
02.203		11704	617-94-7	2-Phenylpropan-2-ol	Dimethyl phenyl carbinol; Phenyl Isopropanol; Phenyldimethylcarbinol; Benzenemethanol;
02.204	4196	10302	150-86-7	Phytol	3,7,11,15- Tetramethylhexadec-2-en-1- ol
02.205		10306	495-76-1	Piperonyl alcohol	Helioalcohol; 1,3-Benzodioxole-5- methanol; 3,4-Methylenedioxybenzyl alcohol
02.206		10311	515-03-7	Sclareol	Labd-14-ene-8,13-diol; 4,6,10,10-Tetramethyl-5-(3,3-dimethylpent-4-enyl)-bicyclo[4.4.0]decan-4-ol

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.207	4079		21653-20-3	Thujyl alcohol	Bicyclo[3.1.0]hexan-3-ol, 4-methyl-1-(1-methyl-ethyl)-, (1S, 3S, 4R, 5R)-; 3-Thujanol, (1S, 3S, 4R, 5R)-(-)-; Bicyclo[3.1.0]hexan-3-ol, 4-methyl-1-(1-methyl-ethyl)-, [1S-(1.alpha., 3.alpha., 4.alpha., 5.alpha.)]-; (-)-3-Neoisothujanol; (-)-Thujol; 3-Neoisothujanol, (-)-; Thujol, (-)-
02.209	3962		116-02-9	3,3,5-Trimethylcyclohexan-1-ol	Cyclonol; Homomenthol;
02.210	4068		37617-03-1	2-Undecen-1-ol	1-Hydroxy-2-undecene; trans-2-Undecenol
02.213	3737	690	498-00-0	Vanillyl alcohol	4-Hydroxy-3-methoxybenzyl alcohol
02.214		10321	89-88-3	Vetiverol	Vetivenol; Vetivol; 2-Hydroxymethyl-6-methyl-9-(1-methylene-ethyl)-bicyclo[5.3.0]decane and 2-Hydroxymethylisoprop-5-enyl-tricyclo[6.2.1.0(3.7)]undecane
02.216	3006	74	77-42-9	12-beta-Santalen-14-ol	beta-Santalol;
02.217	3006	74	115-71-9	12-alpha-Santalen-14-ol	alpha-Santalol;
02.218	2665	63	1490-04-6	DL-Menthol	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
02.222		10298	39161-19-8	3-Pentenol-1	
02.224	3784		87061-04-9	3-(1-Menthoxy)propane-1,2-diol	
02.226		67	142-50-7	[S-(cis)]-3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol	Nerolidol
02.229	2309	59	7540-51-4	(-)-3,7-Dimethyl-6-octen-1-ol	
02.231	2780	589	28069-72-9	tr-2, cis-6-Nonadien-1-ol	
02.234	4049	10293	10340-23-5	3-Nonen-1-ol	
02.242		10182	111-76-2	2-Butoxyethan-1-ol	Ethylene glycol monobutyl ether;
02.243	3884		56805-23-3	(E)-3-(Z)-6-Nonadien-1-ol	
03.001	2465	182	470-82-6	1,8-Cineole	Eucalyptol; 1,8-oxido-p-menthane; 1,3,3-Trimethyl-2-oxabicyclo[2.2.2]octane; 1,8-Epoxy-p- menthane
03.003	2144	521	539-30-0	Benzyl ethyl ether	Ethyl benzyl ether;
03.004	2371	11856	103-50-4	Dibenzyl ether	Benzyl ether; Benzyl oxide;
03.005	3131	10911	2679-87-0	2-Butyl ethyl ether	Ether, sec-butyl ethyl; Ethyl sec-butyl ether;
03.006	3198	11812	3558-60-9	2-Methoxyethyl benzene	Methyl phenethyl ether; Phenethyl methyl ether; Phenylethylmethylether;
03.007	3658	11225	470-67-7	1,4-Cineole	1,4-Epoxy-p-menthane

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
03.010	2139	520	588-67-0	Benzyl butyl ether	
03.011		10910	538-86-3	Benzyl methyl ether	
03.019	3777		22094-00-4	Prenyl ethyl ether	Ethyl 3-methylbut-2-enyl ether; 1- Ethoxy-3-methylbut-2-ene
03.023	4069		1608-72-6	1-Ethoxyethylacetate	
04.002	2922	170	94-86-0	6-Ethoxyprop-3-enylphenol	1-Ethoxy-2-hydroxy-4- propenylbenzene; 5-Propenylguaethol; 3-Propenyl-6-ethoxyphenol; Hydroxymethyl anethole;
04.003	2467	171	97-53-0	Eugenol	4-Allylguaiacol; 2-Methoxy-4-prop-2- enylphenol; 1-Hydroxy-2-methoxy-4- allylbenzene; 1-Hydroxy-2-methoxy-4- propenylbenzen; 4-Allyl-2-methoxyphenol
04.004	2468	172	97-54-1	Isoeugenol	4-Propenylguaiacol; 2-methoxy-4- propenylphenol; 1-Hydroxy-2- methoxy-4-propen-1-ylbenzene; 2-Methoxy-4-(prop-1-enyl)phenol
04.005	2532	173	90-05-1	2-Methoxyphenol	Guaiacol; o-Methylcatechol; 1- Hydroxy-2-methoxybenzene; o- Methoxyphenol; 1-Oxy-2-methoxybenzene;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
04.006	3066	174	89-83-8	Thymol	1-Methyl-3-hydroxy-4- isopropylbenzene; 3-Hydroxy-p- Cymene; alpha-Cymophenol; 2-Isopropyl-5-methylphenol
04.007	2671	175	93-51-6	2-Methoxy-4-methylphenol	4-Methylguaiacol; 1-Hydroxy-2- methoxy-4-methylbenzene; 3- Methoxy-4-hydroxytoluene; Creosol;
04.008	2436	176	2785-89-9	4-Ethylguaiacol	1-Hydroxy-2-methoxy-4- ethylbenzene; 2-Methoxy-2- ethylphenol; Homocresol; 4-Ethyl-2-methoxyphenol
04.009	2675	177	7786-61-0	2-Methoxy-4-vinylphenol	Vinyl guaiacol; 4-Hydroxy-3- methoxystyrene; p-Vinylcatechol-O- methyl ether; p-Vinylguaiacol;
04.010	2086	183	4180-23-8	1-Methoxy-4-(prop-1(trans)-enyl)benzene	trans-Anetole; Isoestragole; 1- Methoxy-4-propenylbenzene; 1- Propene, 1-(4-methoxyphenyl); 4- Methoxy-1-propenylbenzene; Anise camphor;
04.013	2476	186	93-16-3	1,2-Dimethoxy-4-(prop-1-enyl)benzene	Methyl isoeugenol; 1,2-Dimethoxy-4-propenylbenzene; 4- Propenylveratrole; 1,2-Dimethoxy-4- propen;



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
04.014	2680	187	578-58-5	1-Methoxy-2-methylbenzene	o-Methylanisole; o-Cresyl methyl ether; 2-Methoxy toluene; o- Methoxytoluene; methyl o-Tolyl ether;
04.015	2681	188	104-93-8	1-Methoxy-4-methylbenzene	p-Methylanisole; o-Methyl-p-Cresol; 4-Methoxytoluene; Methyl p-tolyl ether; p-Cresyl methyl ether; p- Methoxytoluene;
04.016	2385	189	151-10-0	1,3-Dimethoxybenzene	m-Dimethoxybenzene; Resorcinol dimethyl ether; Dimethyl resorcinol;
04.017	2472	190	7784-67-0	1-Ethoxy-2-methoxy-4-(prop-1-enyl)benzene	Ethyl isoeugenyl ether; 1-Ethoxy-2- methoxy-4-benzene; 2-Ethoxy-5- propenylanisole; Ethyl isoeugenol;
04.018	3698	522	120-11-6	Benzyl isoeugenyl ether	Benzyl isoeugenol; Isoeugenyl benzyl ether; Benzyl 2-methoxy-4- propenylphenyl ether; 1-Benzyloxy-2- methoxy-4-propenylbenzene; Benzyl 2-methoxy-4-prop-1-enylphenyl ether
04.019	3595	537	95-87-4	2,5-Dimethylphenol	1-Hydroxy-2,5-dimethylbenzene;
04.020		538	108-68-9	3,5-Dimethylphenol	
04.021		549	620-17-7	3-Ethylphenol	
04.022	3156	550	123-07-9	4-Ethylphenol	4-Hydroxyethylbenzene;
04.026	3530	617	108-39-4	3-Methylphenol	m-Cresol; 1-Hydroxy-3- methylbenzene; 1-Methyl-3- hydroxybenzene; m-Methylphenol;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
04.027	3480	618	95-48-7	2-Methylphenol	o-Cresol; 1-Hydroxy-2- methylbenzene; 2-Hydroxy-1- methylbenzene; o-Cresylic acid; o-Hydroxytoluene; o-Methylphenol;
04.028	2337	619	106-44-5	4-Methylphenol	p-Cresol; 4-Hydroxytoluene; 1-Methyl- 4-hydroxybenzene; 1-Hydroxy-4- methylbenzene; 4-Cresol; p-Cresylic acid;
04.029		680	120-80-9	Benzene-1,2-diol	Catechol;
04.031	2245	2055	499-75-2	Carvacrol	2-p-Cymenol; 2-Hydroxy-p-cymenol; 2-Cyclohexen-1-one, 6-methyl-3-(1- methylethyl)-; 2-Hydroxy-p-Cymene; 2-Methyl-5-isopropylphenol; 5- Isopropyl-2-methylphenol
04.032	2097	2056	100-66-3	Anisole	Methyl phenyl ether; Phenyl methyl ether; Methoxybenzene
04.033	2768	2058	93-18-5	beta-Naphthyl ethyl ether	2-Ethoxynaphthalene; Ethyl 2- naphthyl ether; Ethyl beta-Naphthyl ether; Nerolin; Nerolin II;
04.034	2386	2059	150-78-7	1,4-Dimethoxybenzene	p-Dimetoxybenzene; Hydroquinone dimethyl ether; Dimethylhydroquinone; Dimethyl hydroquinone; 4-Methoxyphenyl methyl ether;
04.035	3667	2201	101-84-8	Diphenyl ether	Diphenyl oxide; Phenyl ether;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
04.036	3137	2233	91-10-1	2,6-Dimethoxyphenol	2-Hydroxy- 1,3-dimethoxybenzene; Pyrogallol dimethyl ether; Syringol;
04.037	3695	2258	622-62-8	4-Ethoxyphenol	Hydroquinone monoethyl ether; 1- Ethoxy-4- hydroxybenzene; p- Ethoxyphenol;
04.038	2246	11840	4732-13-2	Carvacryl ethyl ether	2-Ethoxy-p-Cymene; Ethyl carvacryl ether; 2- Ethoxy-4-isopropyl-1- methylbenzene
04.039	2930	11835	104-45-0	1-Methoxy-4-propylbenzene	p-Propylanisole; Dihydroanethole; p-n- Propyl anisole; 4- Propylmethoxybenzene;
04.040	3138	11228	6380-23-0	1,2-Dimethoxy-4-vinylbenzene	3,4- Dimethoxystyrene;
04.041	3223	11811	108-95-2	Phenol	Carbolic acid; Hydroxybenzene; Benzenol; Phenyl hydroxide;
04.042	3249	11261	576-26-1	2,6-Dimethylphenol	2,6-Xylenol; 2-Hydroxy-1,3- dimethylbenzene;
04.043	3436	11245	1076-56-8	1-Isopropyl-2-methoxy-4-methylbenzene	Thymol methyl ether; 3- Methoxy-p- cymene; 3- Methoxy-para-Cymene; Thymol methylether;
04.044	3461	11234	88-69-7	2-Isopropylphenol	Phenol, 2-(1-methylethyl)-, 1-Hydroxy- 1- isopropylbenzene; o-Cumenol; o- Isopropylphenol;
04.045	3485	11905	20920-83-6	2-(Ethoxymethyl)phenol	
04.046	3522	11908	644-35-9	2-Propylphenol	1-(2-Hydroxyphenyl)propane;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
04.047	3589	11250	108-46-3	Benzene-1,3-diol	Resorcinol; 1,3- Dihydroxybenzene; m- Dihydroxybenzene;
04.048	3596	11262	95-65-8	3,4-Dimethylphenol	3,4-Xylenol; 1-Hydroxy-3,4- dimethylbenzene;
04.049	3598		2785-87-7	2-Methoxy-4-propylphenol	4-Propyl-ortho-Methoxyphenol; 4- Propylguaicol; 5-Propyl-ortho- Hydroxyanisole; Dihydroeugenol;
04.050	3649		645-56-7	4-Propylphenol	
04.051	3655	11214	6627-88-9	4-Allyl-2,6-dimethoxyphenol	Phenol, 2,6-dimethoxy-4-(2-propenyl)- ; 4- Allylsyringol; 4-Methoxyeugenol;
04.052	3671	11231	14059-92-8	4-Ethyl-2,6-dimethoxyphenol	4-Ethylsyringol;
04.053	3704		6638-05-7	4-Methyl-2,6-dimethoxyphenol	4-Methylsyringol; 2,6- Dimethoxy-p- cresol;
04.054	3719	11886	2173-57-1	Isobutyl beta-naphthyl ether	2-Isobutoxynaphthalene; Fragarol; 2- Methylpropyl beta-naphthyl ether
04.055	3728		20675-95-0	2,6-Dimethoxy-4-prop-1- enylphenol	4-Propenylsyringol; 6- Methoxyisoeugenol;
04.056	3729		6766-82-1	2,6-Dimethoxy-4-propylphenol	4-Propylsyringol;
04.057	3739	11257	2628-17-3	4-Vinylphenol	4-Ethenylphenol; 4-Hydroxystyrene;
04.058	4075	11218	501-92-8	4-Allylphenol	p-Allylphenol;
04.059		11224	6379-73-3	Carvacryl methyl ether	5-Isopropyl-2-methylmethoxy- benzene; 4- Isopropyl-2-methoxy-1- methylbenzene

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
04.061		11229	28343-22-8	2,6-Dimethoxy-4-vinylphenol	
04.062	3799	10320	91-16-7	1,2-Dimethoxybenzene	Veratrole; o-Dimethoxybenzene;
04.063	3828		6738-23-4	1,3-Dimethyl-4-methoxybenzene	2,4-Dimethyl-1-methoxybenzene;
04.064	3918		98-54-4	4-(1,1-Dimethylethyl)phenol	4-tert-Butylphenol; 1-Hydroxy-4-tert-butylbenzene; Ucar butylphenol;
04.065		11258	526-75-0	2,3-Dimethylphenol	2,3-Xylenol; 1-Hydroxy-2,3-dimethylbenzene;
04.066		11259	105-67-9	2,4-Dimethylphenol	2,4-Xylenol; 1-Hydroxy-2,4-Dimethylbenzene; 4,6-Dimethylphenol;
04.070		11232	90-00-6	2-Ethylphenol	Phlorol; 1-ethyl-2-hydroxybenzene;
04.077		11241	150-76-5	4-Methoxyphenol	p-Hydroxyanisole; Hydroquinone monomethyl ether;
04.085	3963		2416-94-6	2,3,6-Trimethylphenol	3-Hydropseudocumene;
04.088	2086	183	104-46-1	1-Methoxy-4-(1-propenyl)benzene	Anethole; p-propylanisole; Isoestragole; p-propylphenyl methyl ether; Propenylanisole;
04.093	3796		82654-98-6	Butyl vanillyl ether	4-(Butoxymethyl)-2-methoxyphenol; Butyl 4-hydroxy-3-methoxybenzyl ether
04.094	3815		13184-86-6	Ethyl 4-hydroxy-3-methoxybenzyl ether	Ethyl 4-hydroxy-3-methoxybenzyl ether

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.001	2003	89	75-07-0	Acetaldehyde	Ethanal; Acetic aldehyde;
05.002	2923	90	123-38-6	Propanal	Propion aldehyde; Propyl aldehyde; Methylacetaldehyd; Propan-1-al; Aldehyde c-3;
05.003	2219	91	123-72-8	Butanal	n-Butyraldehyde; Butyl aldehyde; Butyric aldehyde; n-Butanal; Butan-1- al; n-Butyl aldehyde;
05.004	2220	92	78-84-2	2-Methylpropanal	Isobutanal; Isobutyraldehyde; Butyraldehyde(iso); Butyl iso aldehyde; Isobutyric aldehyde; Isobutyl aldehyde; Butyric iso aldehyde;
05.005	3098	93	110-62-3	Pentanal	Valeraldehyde; n-Valeric aldehyde; Amyl aldehyde; Valeric aldehyde; Valeral; Pentan-1-al; Aldehyde c- 5;
05.006	2692	94	590-86-3	3-Methylbutanal	Isovaleraldehyde; 3- Methylbutylaldehyde; Isoamyl aldehyde; Amyl iso aldehyde; Isovaleric aldehyde; Isovaleraldehyde; Isovaleral;
05.007	2426	95	97-96-1	2-Ethylbutanal	2-Ethylbutyraldehyde; Diethyl acetaldehyde;
05.008	2557	96	66-25-1	Hexanal	Aldehyde C-6; Hexaldehyde; Hexoic aldehyde; Caproic aldehyde; Caproaldehyde; n-Hexaldehyde;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.009	2797	97	124-13-0	Octanal	Aldehyde C-8; Octyl aldehyde; Caprylic aldehyde; Caprylaldehyde; Octylaldehyde; n-Octylaldehyde;
05.010	2362	98	112-31-2	Decanal	Aldehyde C-10; Decyl aldehyde; Capraldehyde; Capric aldehyde; n- Decyl aldehyde;
05.011	2615	99	112-31-2	Dodecanal	Aldehyde C-12; Lauric aldehyde; Lauryl Aldehyde; n-dodecyl aldehyde; Duodecyl aldehyde; Lauraldehyde; Dodecan-1-al;
05.012	2583	100	107-75-5	3,7-Dimethyl-7-hydroxyoctanal	Hydroxycitronellal; 7-hydroxy-3,7- dimethyloctan-1-al; Laurine; Citronellalhydrate,;
05.013	2127	101	100-52-7	Benzaldehyde	Benzene methylal; Benzene carbonal; Benzoic aldehyde; Benzene carboxaldehyde;
05.014	2286	102	104-55-2	Cinnamaldehyde	Cinnamic aldehyde; Phenylacrolein; Cinnamal; 3-Phenylpropenal; 3- Phenyl-2-propen-1-al; $\beta$ -Phenylacrolein; 3-Phenylprop-2-enal
05.015	2670	103	123-11-5	4-Methoxybenzaldehyde	p-Anisaldehyde; aubepine; Anisic aldehyde; Aubepine liquid;
05.016	2911	104	120-57-0	Piperonal	Heliotropine; Piperonyl aldehyde; Dioxymethylene protocatechuic aldehyde; 3,4-Methylenedioxybenzaldehyde

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.017	3109	106	120-14-9	Veratraldehyde	O-Methyl vanillin; p-Veratric aldehyde; Dimethyl ether protocatechualdehyde; 3,4-Dimethoxybenzenecarbonal; 3,4-Dimethoxybenzaldehyde
05.018	3107	107	121-33-5	Vanillin	Methyl protocatechuic aldehyde; Protocatechualdehyde-3-methylether; Vanillic aldehyde; Methylprotocatechuic aldehyde; 4-Hydroxy-3-methoxybenzaldehyde
05.019	2464	108	121-32-4	Ethyl vanillin	Bourbonal; Ethyl protal; 3-Ethoxyprotocatechualdehyde; 3-Ethoxy-4-hydroxybenzaldehyde
05.020	2303	109	5392-40-5	Citral	Lemarome; Geranial; 3,7-Dimethyl- 2,6-octadienal; Neral; 3,7- Dimethylocta-2,6-dienal
05.021	2307	110	106-23-0	Citronellal	3,7-Dimethyl-6-octenal; Rhodinal; 3,7-Dimethyloct-6-enal
05.022	2341	111	122-03-2	4-Isopropylbenzaldehyde	Cuminaldehyde; p- isopropylbenzaldehyde; Cuminic aldehyde; Cuminal; Cumaldehyde; p-Propyl iso benzaldehyde;
05.023	2390	112	7779-07-9	2,6-Dimethyloctanal	Isodecylaldehyde; Decylaldehyde(iso);
05.024	2727	113	7786-29-0	2-Methyloctanal	Methylhexylacetaldehyde; Methyl hexyl acetaldehyde;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.025	2782	114	124-19-6	Nonanal	Pelargonic aldehyde; Aldehyde C-9; Pelargonaldehyde; Pelargonic aldehyde; Nonanoic aldehyde;
05.026	3068	115	529-20-4	o-Tolualdehyde	2-Methylbenzaldehyde
05.027	3068	115	1334-78-7	Tolualdehyde	Toluic aldehyde (mixed 2,3,4); 2-,3- and 4-Methylbenzaldehyde
05.028	3068	115	620-23-5	m-Tolualdehyde	3-Methylbenzaldehyde
05.029	3068	115	104-87-0	p-Tolualdehyde	4-Methylbenzaldehyde
05.030	2874	116	122-78-1	Phenylacetaldehyde	alpha-Toluic aldehyde; alpha- Tolualdehyde; Hyacinthin; Phenylacetic aldehyde; Benzylcarboxyaldehyde; 1-Oxo-2- phenylethane;
05.031	2540	117	111-71-7	Heptanal	Aldehyde C-7; n-Heptaldehyde; Heptyl aldehyde; Heptaldehyde; Enanthaldehyde; Enanthal; Aldehyde Heptan-1-alc-7;
05.032	2763	118	124-25-4	Tetradecanal	Myristaldehyde; Aldehyde C-14; Myristic aldehyde; Tetradecyl aldehyde; Aldehyde c-14 (Myristic); Tetradecan-1-al;
05.033	2438	120	10031-88-6	2-Ethylhept-2-enal	2-Ethyl-3-butylacrolein;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.034	3092	121	112-44-7	Undecanal	Undecanoic aldehyde; Undecylic aldehyde; Hendecanal; Aldehyde c-11 undecylic; n-Undecylaldehyde; Undecan-1-al;
05.035	3095	122	112-45-8	Undec-10-enal	Undecylenic aldehyde (mixed isomers); Undecenal; Intreleven aldehyde; Aldehyde C-11;
05.036	3094	123	143-14-6	Undec-9-enal	Undecylenic aldehyde; Hendecen-9-al; Aldehyde C-11 undecylenic; 9- undecylenic aldehyde;
05.037	2402	124	4826-62-4	2-Dodecenal	3-Nonylacrolein; dodec-2-enal;
05.038	2886	126	93-53-8	2-Phenylpropanal	2-Phenylpropionaldehyde; Hydratropaldehyde; alpha- Methyltolualdehyde; alpha- Methylphenylacetaldehyde; alpha- Phenylpropionaldehyde;
05.039	2191	127	7492-44-6	alpha-Butylcinnamaldehyde	2-Benzylidene hexanal; Butyl cinnamic aldehyde; alpha-Butyl-beta- phenylacrolein; 2-Butyl-3-phenylprop- 2-enal
05.040	2061	128	122-40-7	alpha-Pentylcinnamaldehyde	alpha-Amylcinnamaldehyde; Amyl cinnamic aldehyde; alpha-amyl-beta- phenyl-acrolein; 2-Benzylidene heptanal; alpha-Pentyl-cinnamaldehyde; 2-Pentyl-3- phenylprop-2-enal

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.041	2569	129	101-86-0	alpha-Hexylcinnamaldehyde	2-Benzylidene-octanal; alpha-n-Hexyl cinnamic aldehyde; alpha-n-Hexyl- beta-phenyl acrolein; 2-Benzylideneoctanal
05.042	3071	130	104-09-6	p-Tolylacetaldehyde	4-Methylphenylacetaldehyde
05.043	3078	131	99-72-9	2-(p-Tolyl)propionaldehyde	p-methyl-alpha- Methylphenylacetaldehyde; p-methylhydratropaldehyde; 2-(4-Methylphenyl)propanal
05.044	2954	132	4395-92-0	p-Isopropyl phenylacetaldehyde	Cumylacetaldehyde; 2-(p-Isopropylphenyl)acetaldehyde; Cortexal; Cumylaldehyde; p-Cumen-7- carboxaldehyde; p-Propylphenylacetaldehyde;
05.045	2743	133	103-95-7	3-(p-Cumenyl)-2-methylpropionaldehyde	Cyclamen aldehyde; p-Isopropyl-alpha-methylhydrocinnamaldehyde; Cyclamal; Cyclaviol; Cyclasal; alpha- Methyl-p-isopropylhydrocinnamaldehyde; 2- Methyl-3-(4-isopropylphenyl)propanal
05.046	2737	134	40654-82-8	2-Methyl-4-phenylbutyaldehyde	2-Methyl-4-phenylbutanal;
05.047	3984	558	123-08-0	4-Hydroxybenzaldehyde	p-Hydroxybenzaldehyde;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.048	3181	571	1504-74-1	2-Methoxycinnamaldehyde	beta-o-Methoxyphenyl acrolein; 3-o-Methoxyphenyl-2-propenal; 3-(2-Methoxyphenyl)prop-2-enal
05.049	2691	575	96-17-3	2-Methylbutyraldehyde	2-Methylbutanal; Methyl ethyl acetaldehyde; alpha-Methyl butyraldehyde; 2-Methylbutanal-1;
05.050	2697	578	101-39-3	alpha-Methylcinnamaldehyde	2- Methylcinnamaldehyde; alpha- methylcinnamic aldehyde; alpha- Methylcinnamal; alpha-Methyl cinnamic aldehyde; 2-Methyl-3- phenylprop-2-enal
05.051	3182	584	65405-67-6	3-(4-Methoxyphenyl)-2-methylprop-2-enal	alpha-Methyl-p- methoxycinnamaldehyde; 3-(p-Methoxyphenyl)-2-methyl-2-propenal;
05.052	2748	587	41496-43-9	2-Methyl-3-(p-tolyl)propionaldehyde	2-Methyl-3-(4-methylphenyl)propanal;
05.053	4010	594	123-63-7	2,4,6-Trimethyl-1,3,5-trioxane	Paraldehyde; Paracetaldehyde;
05.055	3004	605	90-02-8	Salicylaldehyde	Salicylic aldehyde; o- Hydroxybenzaldehyde; Salicylal; 2- Hydroxybenzaldehyde
05.056	2413	626	10031-82-0	4-Ethoxybenzaldehyde	Homoanisaldehyde;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
05.057	3429	640	142-83-6	Hexa-2(trans),4(trans)-dienal	2-Propylene acrolein; Sorbic aldehyde; Hexa-2,4-dienal;
05.058	3377	659	557-48-2	Nona-2(trans),6(cis)-dienal	2,6-Nonadienal; Cucumber aldehyde; Nona-2,6-dienal;
05.059	3580	661	2277-19-2	Non-6(cis)-enal	cis-6-Nonen-1-al; Non-6-enal;
05.060	3215	663	2363-89-5	Oct-2-enal	alpha-Amylacrolein; 2-Pentyl acrolein;
05.061		664	63826-25-5	Oct-6-enal	
05.062	3224	670	4411-89-6	2-Phenylcrotonaldehyde	2-Phenyl-but-2-en-1-al; 2-Phenylbut- 2(trans)-enal
05.064	3638	685	13552-96-0	Trideca-2(trans),4(cis),7(cis)-trienal	Trideca-2,4,7-trienal;
05.066		703	120-25-2	4-Ethoxy-3-methoxybenzaldehyde	Vanillin ethyl ether;
05.068	3756	705	4748-78-1	4-Ethylbenzaldehyde	p-Ethylbenzaldehyde;
05.069	3413	706	123-15-9	2-Methylpentanal	2-Methylvaleraldehyde;
05.070	3165	730	2463-63-0	2-Heptenal	3-Butylacrolein; $\beta$ -Butylacrolein; Hept- 2-enal; Trans-Hept-2-enal;
05.071	3212	732	6750-03-4	Nona-2,4-dienal	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.072	3213	733	18829-56-6	trans-2-Nonenal	3-Hexyl-2-propenal; Non-2-enal; 3 or $\beta$ -hexyl acrolein; Heptyliceneacetaldehyde;
05.073	2560	748	6728-26-3	Hex-2(trans)-enal	$\beta$ -Propylacrolein; Leaf aldehyde; trans- hex-2-enal;
05.074	2389	2006	106-72-9	2,6-Dimethylhept-5-enal	Melonal; 2,6-Dimethyl-2-hepten-7-al;
05.075	2561	2008	6789-80-6	Hex-3(cis)-enal	cis-beta,gamma-Hexylenic aldehyde; Hex-3-enal;
05.076	2366	2009	3913-71-1	Dec-2-enal	Decenaldehyde; 3-Heptylacrolein; Decylenic aldehyde; Dec-2-enal; 2- Decen-1-al;
05.077	2749	2010	110-41-8	2-Methylundecanal	Methyl nonyl acetaldehyde; Aldehyde C-12; MNA; 2-Methylhendecanal; Methyl nonyl acetaldehyde;
05.078	3082	2011	7774-82-5	Tridec-2-enal	3-Decylacrolein;
05.079	2310	2012	7492-67-3	Citronellyl oxyacetaldehyde	Citronelloxyacetaldehyde; 6,10- Dimethyl-3-oxa-9-undecenal; 6,10- Dimethyl-3-oxaundec-9-enal
05.080	2887	2013	104-53-0	3-Phenylpropanal	3-Phenylpropionaldehyde; Hydrocinnamaldehyde; Phenylpropyl aldehyde; Benzyl acetaldehyde; beta-Phenyl propionaldehyde;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
05.081	3135	2120	2363-88-4	2,4-Decadienal	Deca-2,4-dienal;
05.082		2121	13553-09-8	Dodeca-3,6-dienal	
05.084	3164	729	4313-03-5	Hepta-2,4-dienal	
05.085	3289	2124	6728-31-0	Hept-4-enal	cis-4-Hepten-1-al; cis-4-Ethylidene butyraldehyde; n- Propylidenebutyraldehyde;
05.090	3194	2129	623-36-9	2-Methylpent-2-enal	alpha-Methyl-beta-ethyl acrolein; 2,4-Dimethylcrotonaldehyde;
05.091	3697	2130	698-27-1	2-Hydroxy-4-methylbenzaldehyde	4-Methylsalicylaldehyde; 4- Methylsalicylic aldehyde; 2,4- Cresotaldehyde;
05.094	2957	2261	7775-00-0	3-(4-Isopropylphenyl)propionaldehyde	Cumyl acetaldehyde; Cumylacetaldehyde; p-Cumylpropanal; p- isopropylhydrocinnamaldehyde; p- propylhydrocinnamaldehyde;
05.095	3407	2281	497-03-0	2-Methylcrotonaldehyde	2-Methylbut-2(trans)-enal
05.096	3264	2297	30390-50-2	4-Decenal	Decenaldehyde, Dec-4-enal (cis);
05.097	2738	135	2439-44-3	3-Methyl-2-phenylbutyraldehyde	3-Methyl-2-phenylbutanal; alpha-Isopropylphenylacetaldehyde; alpha- iso-propyl phenylacetaldehyde;
05.098	3178	10347	29548-14-9	p-Menth-1-en-9-al	Carvomenthinal;
05.099	3199	10365	21834-92-4	5-Methyl-2-phenylhex-2-enal	2-Phenyl-5-methyl-2-hexenal;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
05.100	3200	10366	26643-91-4	4-Methyl-2-phenylpent-2-enal	
05.101	3217	11695	764-40-9	Penta-2,4-dienal	
05.102	3218	10375	764-39-6	Pent-2-enal	3-Ethylacrolein;
05.103	3318	10378	939-21-9	3-Phenylpent-4-enal	beta-Vinylhydrocinnamaldehyde; 3-Phenyl-3-vinylpropionaldehyde;
05.104	3389	10383	116-26-7	2,6,6-Trimethylcyclohexa-1,3-diene-1-carbaldehyde	Safranal; Dehydro-β-Cyclocitral; 1,1,3-Trimethyl-2-formylcyclohexa-2,4-diene;
05.105	3392	10324	25409-08-9	2-Butylbut-2-enal	2-Ethylidenehexanal; 2-Ethylidene hexanal;
05.106	3395	10379	564-94-3	Myrtenal	Pin-2-en-10-al; Benihinal; 2-Formyl-6,6-dimethylbicyclo[3.1.1]hept-2-ene
05.107	3406	10361	35158-25-9	2-Isopropyl-5-methylhex-2-enal	2-Isopropyl-5-methyl-2-hexenal;
05.108	3422	10385	13162-46-4	Undeca-2,4-dienal	
05.109	3423	11827	2463-77-6	2-Undecenal	2-Undecen-1-al;
05.110	3427		15764-16-6	2,4-Dimethylbenzaldehyde	2,4-Xylylaldehyde; 1-Formyl-2,4-dimethylbenzene;
05.111	3466	10371	56767-18-1	Octa-2(trans),6(trans)-dienal	



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
05.112	3474	10338	472-66-2	2,6,6-Trimethylcyclohex-1-en-1-acetaldehyde	beta-Homocyclocitral;
05.113	3496	10337	4634-89-3	Hex-4-enal	
05.114	3510	10364	5362-56-1	4-Methylpent-2-enal	
05.115	3519	10377	24401-36-3	2-Phenylpent-4-enal	
05.116	3524	10384	5435-64-3	3,5,5-Trimethylhexanal	Isononylaldehyde; tert- Butylisopentanal;
05.117	3557	11788	2111-75-3	p-Mentha-1,8-dien-7-al	Perilla aldehyde; 4-Isopropenyl-1-cyclohexene-1-carboxaldehyde; Perillaldehyde;
05.118	3567	11919	1963-36-6	4-Methoxycinnamaldehyde	3-(4-Methoxyphenyl)prop-2-enal; 3-(4-Methoxyphenyl)prop-2-enal
05.119	3592	10325	4501-58-0	2,2,3-Trimethylcyclopent-3-en-1-yl acetaldehyde	alpha-Campholenic aldehyde; (2,3,3-Trimethylcyclopent-3-en-1-yl-2)acetaldehyde;
05.120	3637		21662-13-5	Dodeca-2,6-dienal	
05.121	3639	2133	432-25-7	2,6,6-Trimethyl-1-cyclohexen-1-carboxaldehyde	1-Cyclohexene-1-carboxaldehyde, 2,6,6-trimethyl-
05.122	3640	10352	1504-75-2	p-Methylcinnamaldehyde	3-p-Tolylpropenal; 3-p-Methylphenyl propenal; 3-(4-Methylphenyl)prop-2-enal

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
05.123	3645		55253-28-6	5-Isopropenyl-2-methylcyclopentanecarboxaldehyde	Photocitral A; Cis-2-Methyl-cis-5-isopropenylcyclopentan-1-carboxaldehyde; 5-(1-Methylene-ethyl)-2-methylcyclopentanecarboxaldehyde
05.124	3646	10354	107-86-8	3-Methylcrotonaldehyde	3-Methyl but-2-enal; Prenal; Senecialdehyde; 3-Methylbut-2(trans)-enal
05.125	3670	11758	21662-16-8	Dodeca-2,4-dienal	E,E-2,4-Dodecadienal;
05.126	3711	10363	49576-57-0	2-Methyloct-2-enal	
05.127	3721	11805	30361-28-5	Octa-2(trans),4(trans)-dienal	E,E-2,4-Octadienal;
05.128	3749		41547-22-2	Oct-5(cis)-enal	(Z)-5-Octenal;
05.129		10350	135-02-4	2-Methoxybenzaldehyde	o-methoxybenzaldehyde; o-Anisaldehyde;
05.130	3141	10380	17909-77-2	alpha-Sinensal	2,6-Dimethyl-10-methylene-2,6,11-dodecatrienal; 2,6-Dimethyl-10-methylene dodeca-2,6,11-trienal
05.134	2748	587	41496-43-9	2-Methyl-3-tolylpropionaldehyde (mixed o,m,p-)	2-Methyl-3-tolyl propanal; 2-Methyl-3-(2,3 or 4-methylphenyl)propanal
05.137	3264	2297	21662-09-9	Dec-4(cis)-enal	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
05.139	3912		39770-05-3	Dec-9-enal	
05.140	3135	2120	25152-84-5	Deca-2(trans),4(trans)-dienal	2,4-Decadienal; Deca-2,4-dienal; Heptenyl acrolein;
05.142		10328	139-85-5	3,4-Dihydroxybenzaldehyde	
05.144	2402	124	20407-84-5	Dodec-2(trans)-enal	
05.147		10331	123-05-7	2-Ethylhexanal	2-Ethyl hexaldehyde; Butyl ethyl acetaldehyde; Alpha- Ethylcaproaldehyde;
05.148	4019		19317-11-4	3,7,11-Trimethyl-2,6,10-dodecatrienal	3,7,11-Trimethyl dodecatrien-2,6,10- al-1; Farnesal; Farnesone
05.150	3165	730	18829-55-5	Hept-2(trans)-enal	(E)-2-hepten-1-al; 2-Heptenal; beta- Butyl acrolein; trans-hept-2-en-1-al;
05.152		10336	629-80-1	Hexadecanal	
05.153		10340	134-96-3	4-Hydroxy-3,5-dimethoxybenzaldehyde	
05.154		10341	4206-58-0	4-Hydroxy-3,5-dimethoxycinnamaldehyde	Sinapaldehyde; 3-(4-Hydroxy-3,5-dimethoxyphenyl)prop-2-enal
05.155		10342	458-36-6	4-Hydroxy-3-methoxycinnamaldehyde	3-(4-Hydroxy-3-methoxyphenyl)prop-2-enal

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
05.158		10351	591-31-1	3-Methoxybenzaldehyde	
05.166		10369	1119-16-0	4-Methylpentanal	4- Methylvaleraldehyde;
05.169	4005		75853-49-5	12-Methyltridecanal	
05.170	2303	109	106-26-3	Neral	3,7-Dimethyl-2(cis),6-octadienal
05.171	3213	733	2463-53-8	Non-2-enal	beta-Hexylacrolein; alpha-Nonenyl aldehyde; Nonylenic aldehyde;
05.172	3766		17587-33-6	Nona-2(trans),6(trans)-dienal	
05.173	4187		57018-53-8	Nona-2,4,6-trienal	
05.174	4262		2100-17-6	4-Pentenal	4-Pentenal
05.178		10381	60066-88-8	beta-Sinensal	2,6-Dimethyl-10-methylene dodeca- 2,6,11-trienal
05.179	4209		51534-36-2	(E)-Tetradec-2-enal	
05.182	3639	10326	432-24-6	2,6,6-Trimethylcyclohex-2-ene- 1-carboxaldehyde	beta- Cyclocitral;
05.184	3423	11827	53448-07-0	Undec-2(trans)-enal	
05.186	3721	11805	5577-44-6	2,4-Octadienal	
05.188	2303	109	141-27-5	trans-3;7-Dimethylocta-2,6- dienal	Geranial;
05.189	2560	748	505-57-7	2-Hexenal	
05.190	3215	663	2548-87-0	trans-2-Octenal	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
05.191	2366	2009	3913-81-3	trans-2-Decenal	
05.192	3923		4440-65-7	3-Hexenal	
05.194	3212	732	5910-87-2	tr-2, tr-4-Nonadienal	
05.195	3082	2011	7069-41-2	trans-2-Tridecenal	
05.196	3422	10385	30361-29-6	tr-2, tr-4-Undecadienal	
05.203	4059		5090-41-5	9-Octadecenal	Olealdehyde; Elialdehyde; Octadecenyl aldehyde; Oleic Aldehyde
05.208	4066		169054-69-7	(Z)-8-Tetradecenal	(Z)-Tetradec-8-enal; 8-Tetradecenal, (Z)-
06.001	2002	35	105-57-7	1,1-Diethoxyethane	Diethyl acetal; Acetaldehyde diethyl acetal; Ethylidene diethyl ether; 1,1- Diethoxyethane.;
06.002	2129	36	1319-88-6	5-Hydroxy-2-phenyl-1,3-dioxane	Benzaldehyde glyceryl acetal; 5- Hydroxy-2-phenyl-1,3-dioxan; 2- Phenyl-m-dioxan-5-ol; 4-Hydroxy methyl-2-phenyl-1,3-dioxolan; Benzalglycerin;
06.003	2128	37	1125-88-8	alpha,alpha-Dimethoxytoluene	Benzaldehyde dimethyl acetal; 1,1- Dimethoxy phenyl methane;
06.004	2304	38	7492-66-2	Citral diethyl acetal	3,7-Dimethyl-2,6-octadienal diethyl acetal; 1,1-Diethoxy-3,7-dimethyl-2,6- octadiene; 1,1-Diethoxy-3,7- dimethylocta-2,6-diene

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
06.005	2305	39	7549-37-3	Citral dimethyl acetal	3,7-Dimethyl-2,6-octadienal dimethyl acetal; 1,1-Dimethoxy-3,7-dimethyl- 2,6-octadiene; 1,1-Dimethoxy-3,7- dimethylocta-2,6-diene
06.006	2876	40	101-48-4	1,1-Dimethoxy-2-phenylethane	alpha-Tolyl aldehyde dimethyl acetal; Phenylacetaldehyde dimethyl acetal;
06.007	2877	41	29895-73-6	Phenylacetaldehyde glyceryl acetal	5-Hydroxy-2-benzyl-1,3-dioxan; 5-Hydroxymethyl-2-benzyl-1,3- dioxolane; 2-Benzyl-4-hydroxy-1,3- dioxane and 2-Benzyl-4-hydroxymethyl-1,3-dioxolane (mixture)
06.008	2798	42	10022-28-3	1,1-Dimethoxyoctane	Octanal dimethyl acetal; C-8- dimethylacetal; Caprylaldehyde dimethyl acetal; Octaldehyde dimethyl acetal; Resedyl acetal;
06.009	2363	43	7779-41-1	10,10-Dimethoxydecane	Decanal dimethyl acetal; Decylaldehyde DMA; Aldehyde C-10 dimethylacetal; 1,1-Dimethoxydecane; Decylaldehyde dimethyl acetal;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
06.010	2584	44	7779-94-4	1,1-Diethoxy-3,7-dimethyloctan-7-ol	Hydroxycitronellal diethyl acetal; 1,1- Diethoxy-3,7-dimethyl-7-octanol; 8,8- Diethoxy-2,6-dimethyl-2-octanol; 7- Hydroxy- 1,1-diethoxy-3,7-dimethyl octane;
06.011	2585	45	141-92-4	1,1-Dimethoxy-3,7-dimethyloctan-7-ol	Hydroxycitronellal dimethyl acetal; 8,8-Dimethoxy-2,6-dimethyl-2- octanol; 1,1-Dimethoxy-3,7-dimethyl- 7-octanol;
06.012	3067	46	1333-09-1	Tolualdehyde glyceryl acetal	2-(o-,m-,p-Cresyl)-5-hydroxydioxan; 2-(methylphenyl)-1,3-dioxan-5-ol; 2-5-hydroxymethyldioxolane; 2-(2,3 and 4-Methylphenyl)-5-hydroxy-1,3-dioxane and 2-(2,3 and 4-Methylphenyl)-5- hydroxymethyl-1,3-dioxolane (mixture)
06.013	2062	47	91-87-2	alpha-Pentylcinnamaldehyde dimethyl acetal	alpha-n-Amyl-beta-phenylacroleindimethylacetal; 1,1- Dimethoxy-2-amyl-3-phenyl-2- propene; 1,1-Dimethoxy-2-pentyl-3- phenylprop-2-ene
06.014	2287	48	5660-60-6	Cinnamaldehyde ethylene glycol acetal	2-Styryl-m-dioxolane; 2-Styryl-1,3- dioxolane; Cinnamic aldehyde ethylene glycol acetal; 2-(2-Phenylethylene)-1,3-dioxolane

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
06.015	3426	510	534-15-6	1,1-Dimethoxyethane	Acetaldehyde dimethyl acetal; Dimethylacetal; Ethylidene dimethyl ether;
06.016	2004	511	7493-57-4	1-Phenylethoxy- 1-propoxy ethane	Acetaldehyde phenethyl propyl acetal; [2-(1-Propoxyethoxy)ethyl]benzene; 1- Phenethoxy- 1-propoxyethane; Propyl phenethyl acetal; Benzene, 2-(1- propoxyethoxy)ethyl; Acetal R; Pepital;
06.017		517	774-48-1	(Diethoxymethyl)benzene	Benzaldehyde diethyl acetal; 1,1- Diethoxyphenyl methane; Phenyl diethoxy methane; 1,1-Diethoxytoluene;
06.019	2148	523	7492-39-9	1-Benzyloxy-1-(2- methoxyethoxy)ethane	Acetaldehyde benzyl methoxyethyl acetal; Acetaldehyde benzyl β- methoxyethyl acetal; 1-Benzoyl-1-(2- methoxyethoxy)ethane;
06.020		531	34764-02-8	1,1-Diethoxydecane	Decanal diethyl acetal; Decan-1-al diethyl acetal; Decylic aldehyde diethylacetal;
06.021		553	688-82-4	1,1-Diethoxyheptane	Heptanal diethyl acetal; Oenanthal diethyl acetal;
06.023		557	3658-93-3	1,1-Diethoxyhexane	Hexanal diethyl acetal; Hexyl aldehyde diethyl acetal;



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
06.024	3384	595	68345-22-2	1,1-Di-isobutoxy-2-phenylethane	Phenylacetaldehyde di-isobutyl acetal; 1,1-Di(2-methylpropoxy)-2-phenylethane
06.025	3378	660	67674-36-6	1,1-Diethoxynona-2,6-diene	Nonadienyl diethyl acetal;
06.027	2875	669	5468-06-4	4,5-Dimethyl-2-benzyl-1,3-dioxolan	Phenylacetaldehyde 2,3-butylene glycol acetal;
06.028	2541	2015	10032-05-0	1,1-Dimethoxyheptane	Heptanal dimethyl acetal; Aldehyde C- 7 dimethyl acetal; Heptaldehyde dimethylacetal; Enanthal dimethyl acetal;
06.029	2542	2016	72854-42-3	Heptanal glyceryl acetal (mixed 1,2 and 1,3 acetals)	2- Hexyl-4-hydroxymethyl-1,3- dioxolan + 2-Hexyl-5-hydroxy-1,3- dioxane; 2-Hexyl-4-hydroxy-1,3- dioxane;
06.030	2888	2017	90-87-9	1,1-Dimethoxy-2-phenylpropane	Phenylpropanal dimethyl acetal; Hydratropic aldehyde dimethyl acetal; 2-Phenylpropionaldehyde dimethyl acetal;
06.031	4047	2135	54306-00-2	1,1-Diethoxyhex-2-ene	2-Hexenal diethyl acetal;
06.032	2130	2226	2568-25-4	4-Methyl-2-phenyl-1,3-dioxolane	Benzaldehyde propylene glycol acetal; 4-Methyl-2-phenyl-m-dioxolane; 4- Methyl-2-phenyl-1,3-dioxolan; Benzaldehyde propylene glycol cyclic acetal;
06.033		2341	871-22-7	1,1-Dibutoxyethane	Acetaldehyde dibutyl acetal;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
06.034		2342	105-82-8	1,1-Dipropoxyethane	n-Propyl acetal; Dipropyl acetal; Acetaldehyde dipropyl acetal;
06.035		2343	10444-50-5	Citral propylene glycol acetal	2-(2,6-Dimethylhepta-1,5-dienyl)-4-methyl-1,3-dioxalane
06.036	3125	10007	64577-91-9	1-Butoxy-1-(2-phenylethoxy)ethane	Acetaldehyde butyl phenethyl acetal; 2- Butoxy-2-phenylethoxy-ethane;
06.037	3349	10011	18492-65-4	1,1-Diethoxyhept-4-ene (cis and trans)	4-Heptenal diethyl acetal;
06.038	3381	10029	5436-21-5	4,4-Dimethoxybutan-2-one	Acetylacetaldehyde dimethyl acetal; 3- Oxobutanal dimethyl acetal; 3- Ketobutyraldehyde, dimethyl acetal;
06.039	3534		67715-79-1	1,2-Di((1'-ethoxy)-ethoxy)propane	4,6,9-Trimethyl-3,5,8,10-tetraoxadodecane; 3,5,8,10- tetraoxadecane, 4,6,9-trimethyl-;
06.040	3593	11930	67715-82-6	1,2,3-Tris([1'-ethoxy]-ethoxy)propane	3,5,9,11-Tetraoxatridecane,7-(1-ethoxyethoxy)-4,10-dimethyl-;
06.041		10055		1-Isobutoxy- 1-ethoxy-2- methylpropane	Isobutanal ethyl isobutyl acetal; 2- Methylpropanal ethyl isobutyl acetal; 1-Ethoxy-2-methyl-1-(2-methylpropoxy)propane
06.042		10057		1-Isobutoxy- 1-ethoxy-3- methylbutane	Isovaleraldehyde ethyl isobutyl acetal; 3- Methylbutanal ethyl isobutyl acetal; 1-Ethoxy-3-methyl-1-(2- methylpropoxy)butane
06.043		10038		1-Isoamyloxy-1-ethoxypropane	Propanal ethyl 3-methylbutyl acetal; 1- Ethoxy- 1-(2-methylpropoxy)ethane

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
06.044		10058		1-Isobutoxy- 1-ethoxypropane	Propanal ethyl isobutyl acetal; 1- Ethoxy- 1-(2-methylpropoxy)propane
06.045		10061		1-Isobutoxy- 1-isopentyloxy-2-methylpropane	Isobutanal isobutyl isoamyl acetal; 2-Methylpropanal isobutyl 3- methylbutyl acetal; 2-Methyl-1-(3- methylbutoxy)-1-(2-methylpropoxy)propane
06.046		10060		1-Isobutoxy- 1-isopentyloxy-3-methylbutane	Isovaleraldehyde isoamyl isobutyl acetal; 3-Methylbutanal isobutyl 3- methylbutyl acetal; 3-Methyl-1-(3- methylbutoxy)-1-(2-methylpropoxy)butane
06.047		10065		1-Isopentyloxy- 1-propoxyethane	Acetaldehyde 3-methylbutyl propyl acetal; 1-(3-Methylbutoxy)-1- propoxyethane
06.048		10066		1-Isopentyloxy-1- propoxypropane	Propanal 3-methylbutyl propyl acetal; 1-(3-Methylbutoxy)-1-propoxypropane
06.050		10003	57006-87-8	1-Butoxy-1-ethoxyethane	Acetaldehyde butyl ethyl acetal;
06.052		10025	13262-24-3	1,1-Di-isobutoxy-2-methylpropane	Isobutanal di-isobutyl acetal; 2- Methylpropanal diisobutyl acetal; 1,1- Di(2-methylpropoxy)-2-methylpropane
06.053		10023	5669-09-0	1,1-Di-isobutoxyethane	Acetaldehyde di-isobutyl acetal; 1,1- Di(2-methylpropoxy)ethane

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
06.054		10026	13262-27-6	1,1-Di-isobutoxypentane	Valeraldehyde di-isobutyl acetal; Pentanal diisobutyl acetal; 1,1-Di(2- methylpropoxy)pentane
06.055		10028	13002-09-0	1,1-Di-isopentyloxyethane	Acetaldehyde di-isoamyl acetal; Acetaldehyde di(3-methylbutyl) acetal; 1,1-Di(3-methylbutoxy)ethane
06.057		10013	3658-94-4	1,1-Diethoxy-2-methylbutane	2-Methylbutanal diethyl acetal;
06.058		10015	1741-41-9	1,1-Diethoxy-2-methylpropane	Isobutanal diethyl acetal; 2- Methylpropanal diethyl acetal;
06.059		10014	3842-03-3	1,1-Diethoxy-3-methylbutane	Isovaleraldehyde diethyl acetal; 3- Methylbutanal diethyl acetal;
06.061		10009	3658-95-5	1,1-Diethoxybutane	Butanal diethyl acetal;
06.064		10012	462-95-3	Diethoxymethane	Formaldehyde diethyl acetal;
06.065		10016	54815-13-3	1,1-Diethoxynonane	Nonanal diethyl acetal;
06.067		10017	3658-79-5	1,1-Diethoxypentane	Valeraldehyde diethyl acetal; Pentanal diethyl acetal;
06.069		10018	4744-08-5	1,1-Diethoxypropane	Propanal diethyl acetal;
06.071		10022	5405-58-3	1,1-Dihexyloxyethane	Acetaldehyde dihexyl acetal;
06.072	4098		18318-83-7	1,1-Dimethoxy-trans-2-hexene	1,1- Dimethoxy- E- 2- hexene; 2- Hexene, 1,1-dimethoxy-, (2E) -; 2- Hexenal, dimethyl acetal, (E) -; 2- Hexene, 1,1- dimethoxy-, (E) -; (E)- 2- Hexenal dimethyl acetal; trans- 2- Hexenal dimethyl acetal

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
06.074		10031	109-87-5	Dimethoxymethane	Formaldehyde dimethyl acetal; Methylal;
06.077	4099		3390-12-3	2,4-Dimethyl-1,3-dioxolane	1,3- Dioxolane, 2,4- dimethyl-; Acetaldehyde cyclic propylene glycol acetal; Propylene acetal
06.079		10040	13602-09-0	1-Ethoxy-1-(2-methylbutoxy)ethane	Acetaldehyde ethyl 2-methylbutyl acetal;
06.080		10049	2556-10-7	1-Ethoxy-1-(2-phenylethoxy)ethane	Acetaldehyde ethyl 2-phenylethyl acetal;
06.081	3775	10034	28069-74-1	1-Ethoxy-1-(3-hexenyloxy)ethane	Ethyl cis-3-hexenyl acetal; Acetaldehyde ethyl 3-hexenyl acetal;
06.082		11948	54484-73-0	1-Ethoxy- 1-hexyloxyethane	Acetaldehyde ethyl hexyl acetal; 1-(1-Ethoxyethoxy) hexane;
06.083		10037	13442-90-5	1-Ethoxy- 1-isopentyloxyethane	Acetaldehyde ethyl 3-methylbutyl acetal; 1-Ethoxy-1-(3- methylbutoxy)ethane
06.084		10039	10471-14-4	1-Ethoxy- 1-methoxyethane	Acetaldehyde ethyl methyl acetal;
06.085		10046	59184-43-9	1-Ethoxy- 1-pentyloxyethane	Acetaldehyde ethyl amyl acetal; Acetaldehyde ethyl pentyl acetal;
06.086		10050	20680-10-8	1-Ethoxy- 1-propoxyethane	Acetaldehyde ethyl propyl acetal;
06.089	4048		6454-22-4	2-Hexyl-4,5-dimethyl-1,3-dioxolane	1,3-Dioxolane,2-hexyl-4,5-dimethyl-; Heptanal 2,3-butandiol acetal
06.091		10054	6986-51-2	1-Isobutoxy- 1-ethoxyethane	Acetaldehyde ethyl isobutyl acetal

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
06.092		10059	75048-15-6	1-Isobutoxy-1-isopentyloxyethane	Acetaldehyde isobutyl isoamyl acetal; Acetaldehyde isobutyl 3-methylbutyl acetal; 1-(3-Methylbutoxy)-1-(2-methylpropoxy)ethane
06.094	3630		1599-49-1	4-Methyl-2-pentyl-1,3-dioxolane	
06.096		10903	122-51-0	Triethoxymethane	Triethyl orthoformate; Ethyl orthoformate;
06.097		10075	7789-92-6	1,1,3-Triethoxypropane	3-Ethoxypropanal diethyl acetal;
06.098	3441	11423	1193-11-9	2,2,4-Trimethyl-1,3-dioxolane	
06.100		10032	13002-08-9	Acetaldehyde dipentyl acetal	
06.102		2016	1708-36-7	2-Hexyl-5-hydroxy-1,3-dioxane	
06.104	3905		68527-74-2	Vanillin propylene glycol acetal	4-methyl-2-(4-hydroxy-3-methoxyphenyl)-1,3-dioxolane;
06.105		10070	13285-51-3	3-Methyl-1,1-di-isopentyloxybutane	Isovaleraldehyde di-isoamyl acetal; 3-Methylbutanal di(3-methylbutyl) acetal; 3-Methyl-1,1-di(3-methylbutoxy)butane
06.106		10071	13112-63-5	2-Methyl-1,1-di-isopentyloxypropane	2-Methyl-1,1-di(3-methylbutoxy)propane

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
06.107		10068	13548-84-0	1-(2-Methylbutoxy)-1-isopentyloxyethane	Methylbutyl acetal; 1-(2-Methylbutoxy)-1-(3-methylbutoxy)ethane
06.120	3808		67785-70-0	DL-Menthone-1,2-glycerol ketal	
06.123		10004		1-Butoxy-1-isopentyloxyethane	Acetaldehyde butyl isoamyl acetal; 1-Butoxy-1-(3-methylbutoxy)ethane
06.124		10024		1,1-Di-isobutoxy-3-methylbutane	Isovaleraldehyde di-isobutyl acetal; 3-Methylbutanal diisobutyl acetal; 1,1-Di(2-methylpropoxy)-3-methylbutane
06.125		10027		1,1-Di-isobutoxypropane	Propanal di-isobutyl acetal; 1,1-Di(2-methylpropoxy)propane
06.127		10036		1-Ethoxy-1-isopentyloxypropane	Butanal ethyl isoamyl acetal; Butanal ethyl 3-methylbutyl acetal; 1-Ethoxy-1-(3-methylbutoxy)propane
06.128		10045		1-Ethoxy-1-pentyloxybutane	Butanal ethyl amyl acetal;
06.129		10043		1-Ethoxy-2-methyl-1-isopentyloxypropane	Isobutanal ethyl isoamyl acetal; 2-Methylpropanal ethyl 3-methylbutyl acetal; 1-Ethoxy-2-methyl-1-(3-methylbutoxy)butane
06.130		10044		1-Ethoxy-2-methyl-1-propoxypropane	Isobutanal ethyl propyl acetal; 2-Methylpropanal ethyl propyl acetal;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
06.131		10042		1-Ethoxy-3-methyl-1-isopentyloxybutane	Isovaleraldehyde ethyl isoamyl acetal; 3-Methylbutanal ethyl 3-methylbutyl acetal; 1-Ethoxy-3-methyl-1-(3-methylbutoxy)butane
06.132	4023		63253-24-7	Vanillin butan-2,3-diol acetal (mixture of stereo isomers)	Vanillin erythro and threo-butan-2,3-diol acetal;
07.001	2969	105	78-98-8	2-Oxopropanal	Pyruvaldehyde; 2- Ketopropionaldehyde; Acetylformaldehyde; Methyl glyoxal; Pyruvic aldehyde; Propan-2-on-1-al;
07.002	2544	136	110-43-0	Heptan-2-one	Ketone C-7; Methyl amyl ketone; Amyl methyl ketone;
07.003	2545	137	106-35-4	Heptan-3-one	Ethyl butyl ketone; Butyl ethyl ketone;
07.004	2009	138	98-86-2	Acetophenone	Methyl phenyl ketone; Acetylbenzene; Acetylbenzol; Benzoylmethide; Phenyl methyl ketone;
07.005	3124	139	122-48-5	Vanillyl acetone	Zingerone; 3-Methoxy-4-hydroxy- benzylacetone; 2-Ethyl methyl ketone; 3-Methoxy-4-methoxybenzylacetone; Vanillylacetone; 4-(4-Hydroxy-3- methoxyphenyl)butan-2-one



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
07.007	2594	141	127-41-3	alpha-Ionone	4-(2,6,6-Trimethyl-2-cyclohexen-1-yl)-3-buten-2-one
07.008	2595	142	14901-07-6	beta-Ionone	$\beta$ -Irisone; 4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-buten-2-one; $\beta$ -Cyclocitrylideneacetone; 4-(2,6,6-Trimethylcyclohex-1-enyl)but-3-en-2-one
07.009	2711	143	7779-30-8	Methyl-alpha-ionone	alpha-Cetone; 5-(2,6,6-Trimethyl-2-cyclohexen-1-yl)-4-penten-3-one; Raldeine; alpha,Cyclocitrylidenemethyl ethyl ketone; 1-(2,6,6-Trimethylcyclohex-2-enyl)pent-1-en-3-one
07.010	2712	144	127-43-5	Methyl-beta-ionone	5-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-4-penten-3-one; Raldeine; $\beta$ -Cyclocitrylidenebutanone, $\beta$ -Methylionone; $\beta$ -Iraldeine; 1-(2,6,6-Trimethylcyclohex-1-enyl)pent-1-en-3-one
07.011	2597	145	79-69-6	4-(2,5,6,6-Tetramethyl-2-cyclohexenyl)-3-buten-2-one	alpha-Irone; 6-Methylionone; 4(2,5,6,6-Tetramethyl-2-cyclohexen-1-yl)-3-buten-2-one;
07.012	2249	146	99-49-0	Carvone	Carvol; 1-Methyl-4-isopropenyl-6-cyclohexen-2-one; p-Mentha-1,8-dien-2-one

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
07.013	2723	147	93-08-3	Methyl 2-naphthyl ketone	2-Acetonaphthone; 2- acetylnaphthalene; oranger crystals; beta-methyl naphthyl ketone; beta-Acetonaphthone;
07.014	2656	148	118-71-8	Maltol	Veltol (Pfizer); Corps praline; 4H- Pyran-4-one, 3-hydroxy-2-methyl; 3- Hydroxy-2-methyl-(1,4-pyran); 2- Methyl pyromeconic acid; 3-Hydroxy- 2-methyl-4-pyrone
07.015	2707	149	110-93-0	6-Methylhept-5-en-2-one	Methyl heptenone; 2-Methyl-2-hepten- 6-one; 2-Methylheptenone; Methyl hexenyl ketone;
07.016	3093	150	112-12-9	Undecan-2-one	Methyl nonyl ketone; 2-hendecanone; Undecanone-2; Methyl nonyl ketone; 2-Hendecanone; 2-Oxoundecane; Nonyl methyl ketone;
07.017	2731	151	108-10-1	4-Methylpentan-2-one	Methyl isobutyl ketone; Isobutyl methyl ketone; Isopropylacetone; Isohexanone; Hexone;
07.018	2558	152	3848-24-6	Hexan-2,3-dione	Methyl propyl diketone; Acetyl butyryl; Acetyl-n-butryl;
07.019	2802	153	111-13-7	Octan-2-one	Methyl hexyl ketone; n-Hexyl methyl ketone; Hexyl methyl ketone; Octan-2- one;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
07.020	2785	154	821-55-6	Nonan-2-one	Methyl heptyl ketone;
07.021	3090	155	7493-59-6	Undeca-2,3-dione	Acetyl nonanyl; Acetyl nonanoyl; Acetyl pelargonyl;
07.022	2677	156	122-00-9	4-Methylacetophenone	p-Methylacetophenone; Methyl p-tolyl ketone; 1-Acetyl-4-methylbenzene; 1-methyl-4-acetylbenzene;
07.023	2387	157	89-74-7	2,4-Dimethylacetophenone	Acetyl-m-Xylene; methyl 2,4- Dimethylphenyl ketone;
07.024	2881	158	122-57-6	4-Phenylbut-3-en-2-one	Benzylidene acetone; Cinnamyl methyl ketone; Methyl styryl ketone; Acetocinnamone; Benzalacetone;
07.025	2740	159	5349-62-2	4-Methyl-1-phenylpentan-2-one	Benzyl isobutyl ketone; Isobutyl benzyl ketone;
07.026	3074	160	7774-79-0	4-(p-Tolyl)butan-2-one	4-(4-Methylphenyl)butan-2-one
07.027	2734	161	1901-26-4	3-Methyl-4-phenylbut-3-en-2-one	Benzylidene methyl acetone; 1-Methyl-1-benzylideneacetone; 3-Benzylidene-1-butanone; alpha-Methyl-alpha- Benzalacetone;
07.028	2132	162	119-53-9	Benzoin	Benzoyl phenyl carbinol; alpha- Hydroxy-alpha-phenylacetophenone; 2- Hydroxy-1,2-diphenylethane; 2- Hydroxy-2-phenylacetophenone

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.029	2672	163	104-20-1	4-(4-Methoxyphenyl)butan-2-one	Anisyl acetone; p-methoxyphenylbutanone; 2-Butanone, 4-(4-methoxyphenyl)-; Raspberry ketone, methyl ether; methyl oxanone; p-Methoxybenzylacetone;
07.030	2673	164	104-27-8	1-(4-Methoxyphenyl)pent-1-en-3-one	Ethone; alpha-Methylanisalacetone; Alpha-Methyl anisylidene acetone; p- Methoxystyryl ethyl ketone;
07.031	2701	165	55418-52-5	Piperonyl acetone	2-Butanone, 4-(1,3-benzodioxol-5-yl); Dulcinyll; Heliotropyl acetone; 4-(3,4-Methylenedioxyphenyl)butan-2-one
07.032	2134	166	119-61-9	Benzophenone	Benzoylbenzene; Diphenyl ketone; Diphenylmethanone; Alpha- Oxodiphenylmethane;
07.033	3552	167	11050-62-7	Isojasmone	2-Hexyl-cyclopent-2-en-1-one and 2- Hexylidene cyclopentanone
07.034	2573	167	17373-89-6	2-Hexylidenecyclopentan-1-one	alpha-Hexylidenecyclopentanone;
07.035	3061	168	17369-60-7	Tetramethyl ethylcyclohexenone (mixture of isomers)	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
07.036	2714	169	127-51-5	alpha-Isomethyl ionone	4-(2,6,6-Trimethyl-2-cyclohexen-1-yl)- 3-methyl-3-buten-2-one; Methyl- gamma-Ionone; Isomethylionone; Gamma-Methylionone; 4-(2,6,6-Trimethylcyclohex-2-enyl)-3- methylpent-3-en-2-one
07.038	2005	570	100-06-1	4-Methoxyacetophenone	Acetanisole; p-Acetylanisole; 4- Acetylanisole;
07.039	2804	592	7786-52-9	Octan-3-on-1-ol	3-Oxo-1-octanol; Caproylethanoate; Hexanoylethanoate; Methylol methyl amyl ketone; 1-hydroxyoctan-3-on;
07.040	3469	599	93-55-0	1-Phenylpropan-1-one	Propiophenone; Phenyl ethyl ketone; Propionylbenzene;
07.041	4151	650	79-89-0	beta-Isomethylionone	Isomethyl beta-ionone; 3-Methyl-4- (2,6,6-trimethylcyclohex- 1-enyl)but-3- en-2-one
07.042	2927	651	645-13-6	4-Isopropylacetophenone	Methyl p-isopropylphenyl ketone; p- Acetylcumene; p-Propylacetophenone;
07.044	3417	666	625-33-2	Pent-3-en-2-one	
07.045	3473	686	2408-37-9	2,2,6-Trimethylcyclohexanone	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
07.046	3738	691	1080-12-2	Vanillylidene acetone	Methyl-3-methoxy-4-hydroxystyryl ketone; Dihydrozingerone; 4-(4-Hydroxy-3-methoxyphenyl)but-3-en-2-one
07.047	3487	692	4940-11-8	Ethyl maltol	Veltol-Plus; 2-Ethylpyromeconic acid; 3-Hydroxy-2-ethyl-4-pyrone; 2-Ethyl-3-ol-4H-pyran-4-one; 2-Ethyl-3-hydroxy-4-pyrone
07.048	3352	718	2497-21-4	4-Hexen-3-one	2-Hexen-4-one; Hex-2-en-4-one; Propylene ethyl ketone;
07.049	3760	719	103-13-9	1-(4-Methoxyphenyl)-4-methylpent-1-en-3-one	Methoxystyryl isopropyl ketone; Isopropyl 4-methyloxystyryl ketone;
07.050	3326	737	67-64-1	Acetone	Propan-2-one; Dimethyl ketone; 2-Oxopropane; $\beta$ -Ketopropane; Pyroacetic ether;
07.051	2008	749	513-86-0	3-Hydroxybutan-2-one	Acetoin; AMC; Acetyl methyl carbinol; 2,3-Butanolone; Dimethylketol; 3-Hydroxy-2-butanone; Gamma-hydroxy-beta-oxobutane;
07.052	2370	752	431-03-8	Diacetyl	Dimethyl diketone; Biacetyl; 2,3-diketobutane; 2,3-Butanedione; Dimethylglyoxal; Butane-2,3-dione
07.053	2170	753	78-93-3	Butan-2-one	Ethyl methyl ketone; Methyl ethyl ketone; Ketone C-4;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.054	2842	754	107-87-9	Pentan-2-one	Ethyl acetone; Methyl propyl ketone; Propyl methyl ketone; Pentane-2-one;
07.055	2588	755	5471-51-2	4-(p-Hydroxyphenyl)butan-2-one	p-Hydroxybenzyl acetone; oxyphenalon; Frambinone; 1-p- Hydroxyphenyl-3-butanone; p- Hydrobenzylacetone; p- Hydroxybenzylacetone;
07.056	2700	758	80-71-7	3-Methylcyclopentan-1,2-dione	2-Hydroxy-3-methylcyclopent-2-en-1- one; Methylcyclopentenolone; 3- Methylcyclopentane- 1,2-dione; cyclotene; Corylone; 3-Methyl-2- cyclopenten-2-ol-1-one;
07.057	3152	759	21835-01-8	3-Ethylcyclopentan-1,2-dione	2-Hydroxy-3-ethyl-2-cyclopenten-1- one; Ethyl cyclopentenolone; Ethyl cyclopentalone; 3-Ethyl-2- cyclopenten- 2-ol-1-one;
07.058	2546	2034	123-19-3	Heptan-4-one	Dipropyl ketone; Butyrone;
07.059	2667	2035	10458-14-7	p-Menthan-3-one	2-Isopropyl-5-methylcyclohexanone; 4- Isopropyl- 1-methylcyclohexan-3-one;
07.060	2841	2039	600-14-6	Pentan-2,3-dione	Acetyl propionyl;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.061	2033	2040	79-78-7	Allyl alpha-ionone	1-(2,6,6-Trimethyl-2-cyclohexene-1-yl)-1,6-heptadien-3-one; Allyl cyclocitrylideneacetone; alpha- AllyliononeS; 1-(2,6,6- Trimethylcyclohex-2-enyl)-1,6- heptadien-3-one
07.062	2803	2042	106-68-3	Octan-3-one	Ethyl amyl ketone; Amyl ethyl ketone;
07.063	2730	2043	7493-58-5	4-Methylpentan-2,3-dione	Acetyl isobutyryl;
07.064	2543	2044	96-04-8	Heptan-2,3-dione	Acetyl pentanoyl; Acetyl valeryl; Valeryl acetyl;
07.065	2587	2045	496-77-5	5-Hydroxyoctan-4-one	Butyrolin; 5-Octanol-4-one;
07.067	2964	2051	29606-79-9	Isopulegone	1-Methyl-4-isopropenylcyclohexan-3- one; 1-Methyl-4-isopropenyl-3- cyclohexanone; 1-Isopropyl-4-methyl-2-cyclohexanone; p-Menth-8-en-3-one
07.069	3059	2053	4433-36-7	Tetrahydro-pseudo-ionone	6,10-Dimethyl-9-undecen-2-one; Dihydrogeranylacetone;; 6,10- Dimethylundec-9-en-2-one
07.070	2146	2140	7492-37-7	3-Benzylheptan-4-one	
07.071		2141	5455-24-3	Octane-4,5-dione	Dibutyryl;
07.072		2143	624-42-0	6-Methylheptan-3-one	Isoamyl ethyl ketone;



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.075	3268	2234	13494-06-9	3,4-Dimethylcyclopentan-1,2-dione	2-Hydroxy-3,4-dimethyl-2-cyclopenten-1-one;
07.076	3269	2235	13494-07-0	3,5-Dimethylcyclopentan-1,2-dione	
07.077	3168	2255	4437-51-8	Hexan-3,4-dione	Dipropionyl; 3,4-Dioxohexane; Diethyl-alpha,beta-di-ketone;
07.078	3460	2259	491-07-6	d,l-Isomenthone	Cis-1-Methyl-4-isopropyl-3-cyclohexanone; cis-para-Menthan-3-one; cis-p-Menthan-3-one
07.079	3226	2275	579-07-7	1-Phenylpropan-1,2-dione	Acetyl benzoyl; Methyl phenyl diketone; Methyl phenyl glyoxal; Phenyl methyl diketone;
07.080	3305	2311	3008-43-3	3-Methylcyclohexan-1,2-dione	3-Methyl-1,2-cyclohexanedione; 2-Methyl-3,4-cyclohexanedione;
07.081	3515	2312	4312-99-6	Oct-1-en-3-one	Vinyl amyl ketone; Amyl vinyl ketone;
07.082	3603	2313	4643-27-0	Oct-2-en-4-one	Butyl propenyl ketone; Propenyl butyl ketone;
07.083	3243	2340	23726-92-3	beta-Damascone	1-(2,6,6-Trimethylcyclohex-1-enyl)but-2-en-1-one
07.084		2350	96-22-0	Pentan-3-one	Dimethyl acetone; Diethyl ketone; Dimethylacetone; Propione; Methacetone;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.086	2397	11839	102-04-5	1,3-Diphenylpropan-2-one	Dibenzyl ketone; Alpha,alpha- Diphenylketone; Benzyl ketone;
07.087	2674	11836	122-84-9	4-Methoxyphenylacetone	Anisyl methyl ketone; 3-(4-Methoxyphenyl)propan-2-one; p-Methoxyphenylacetone; Anisketone; Anisic ketone;
07.088	2713	11852	7784-98-7	Methyl-delta-ionone	5-(2,6,6-Trimethyl-3-cyclohexen-1-yl)- 4-penten-3-one; 1-(2,6,6- Trimethylcyclohex-3-enyl)pent-1-en-3- one
07.089	3166	11164	4674-50-4	Nootkatone	5,6-Dimethyl-8-isopropenylbicyclo[4.4.0]dec-1-en-3- one; 4,4a,5,6,7,8-Hexahydro-6- isopropenyl-4,4a-dimethyl-2(3H)- naphthalene; 4,4a,5,6,7,8-Hexahydro- 4,4a-dimethyl-6-(1-methylene-ethyl)-2(3H)-naphthalenone
07.090	3173	11102	5077-67-8	1-Hydroxybutan-2-one	2-Oxo-1-butanol; Propionyl cabinol; Ethyl hydroxymethyl ketone; 1- Butanol-2-one;
07.091	3175		79-76-5	gamma-Ionone	4-(2,2-Dimethyl-6-methylene- cyclohexyl)-3-buten-2-one; 4-(2- Methylene-6,6-dimethylcyclohexyl)-3-buten-2-one; 4-(2,2-Dimethyl-6-methylenecyclohexyl)but-3-en-2-one

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.092	3176	11128	499-70-7	p-Menthan-2-one	Carvomenthone; Tetrahydromenthone; Tetrahydrocarvone;
07.093	3190	11148	13706-86-0	5-Methylhexan-2,3-dione	2-Methyl-4,5-hexanedione; Acetyl isovaleryl; Isobutyl methyl diketone; Isobutyl methyl glyoxal;
07.094	3196	11786	488-10-8	3-Methyl-2-(pent-2(cis)- enyl)cyclopent-2-en-1-one	cis-Jasmone;
07.095	3261	11044	14765-30-1	2-(sec-Butyl)cyclohexanone	2-But-2-ylcyclohexanone; 2-(1- Methylpropyl)cyclohexanone
07.096	3290	11097	589-38-8	Hexan-3-one	Ethyl propyl ketone;
07.097	3292	11113	59191-78-5	3-(Hydroxymethyl)octan-2-one	
07.098	3360	11134	1193-18-6	3-Methylcyclohex-2-en-1-one	1- Methyl-1-cyclohexenone-3;
07.099	3363	11143	1604-28-0	6-Methylhepta-3,5-dien-2-one	2-methyl-hepta-2,4-dien-6-one; Methylheptadienone,;
07.100	3365	11150	3240-09-3	5-Methylhex-5-en-2-one	2-Methylallylacetone; 2-Methyl-1- hexen-5-one; 2- Methyl-allyl-acetone;
07.101	3368	11853	141-79-7	4-Methylpent-3-en-2-one	Mesityl oxide; Methyl isobutenyl ketone; Isopropylideneacetone;
07.102	3382	11179	1629-58-9	Pent-1-en-3-one	Ethyl vinyl ketone;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
07.103	3388	11194	593-08-8	Tridecan-2-one	Methyl undecyl ketone; Hendecyl methyl ketone;
07.104	3399	11093	4643-25-8	Hept-2-en-4-one	
07.105	3400	11094	1119-44-4	Hept-3-en-2-one	Methyl pentenyl ketone; Butylidene acetone; n-Butylideneacetone;
07.106	3409	11149	5166-53-0	5-Methylhex-3-en-2-one	Isobutylidene acetone;
07.107	3416	11170	1669-44-9	Oct-3-en-2-one	
07.108	3420	11197	23696-85-7	beta-Damascenone	4-(2,6,6-trimethylcyclohexa-1,3- dienyl)-but-2-en-4-one; 1-(2,6,6- Trimethylcyclohexa-1,3- dienyl)but-2- en-1-one
07.109	3421	11200	1125-21-9	2,6,6-Trimethylcyclohex-2-en-1,4-dione	3,5,5-Trimethylcyclohex-2-ene-1,4- dione; 2-Cyclohexenedione-1,4, 3,5,5- trimethyl-;
07.110	3425	11744	542-46-1	Cycloheptadec-9-en-1-one	Civetone; Civetone;
07.111	3434	11135	541-91-3	3-Methylcyclopentadecan-1-one	Muscone; Methylexaltone;
07.112	3435	11137	2758-18-1	3-Methyl-2-cyclopenten-1-one	1-Methyl-1-cyclopenten-3-one;
07.113	3440	11160	925-78-0	Nonan-3-one	Ethyl hexyl ketone;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.114	3442	11206	762-29-8	6,10,14-Trimethylpentadeca-5,9,13-trien-2-one	Farnesyl acetone; 2,6,10-Trimethyl- 2,6,10-pentadecatrien-14-one; 6,10,14- Trimethyl-5,9,13-pentadecatrien-2- one;
07.115	3447	11057	20483-36-7	3,4-Dehydrodihydro-beta-ionone	Dehydrodihydroionone; 4-(2,6,6-trimethylcyclohexadien-1-yl)-2- butanone; 4-(2,6,6-Trimethyl-1,3- cyclohexadienyl)butan-2-one
07.116	3449	11062	43219-68-7	1-(1,4-Dimethylcyclohex-3-en-1-yl)ethan-1-one	4-Acetyl-1,4-dimethylcyclohex- 1-ene;
07.117	3453	11077	42348-12-9	3-Ethyl-2-hydroxy-4-methylcyclopent-2-en-1-one	3-Ethyl-4-methylcyclopent-2-en-1-one; Ethylcyclopentenolone; 3-Ethyl-2- cyclopenten-2-ol-1-one;
07.118	3454	11078	53263-58-4	5-Ethyl-2-hydroxy-3-methylcyclopent-2-en-1-one	5-Ethyl-3-methylcyclopent-2-en-1-one;
07.119	3458	11046	10316-66-2	2-Hydroxycyclohex-2-en-1 -one	Cyclohexane-1,2-dione;
07.120	3459	11198	4883-60-7	2-Hydroxy-3,5,5-trimethylcyclohex-2-en-1-one	3,5,5-Trimethylcyclohexane-1,2- dione; 3,5,5-Trimethyl-1,2- cyclohexanedione;
07.121	3532	11751	10519-33-2	Dec-3-en-2-one	Heptylidene acetone; Oenanthylidene acetone; Enanthylidene acetone;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.122	3537	11914	108-83-8	2,6-Dimethylheptan-4-one	Diisobutyl ketone; Isobutyl ketone; iso- Nonanone; Isovalerone;
07.123	3542	11088	3796-70-1	Geranylacetone	alpha,beta-dihydropseudoionone; 6,10- Dimethyl-5(trans),9-undecadien-2-one
07.124	3548	11784	118-93-4	2-Hydroxyacetophenone	Ethanone, 1-(2-hydroxyphenyl)-; o- acetylphenol;
07.125	3550	11115	3142-66-3	3-Hydroxypentan-2-one	Acetyl ethyl barbonol;
07.126	3553	11918	78-59-1	3,5,5-Trimethylcyclohex-2-en-1-one	Isophorone; Isoacetophenone;
07.127	3560	11189	491-09-8	p-Mentha-1,4(8)-dien-3-one	Piperitenone; 4-Isopropylidene-1- methyl-1-cyclohexen-3-one;
07.128	3565	11703	7764-50-3	Dihydrocarvone	Cis-Dihydrocarvone; cis-Menthen- 8(9)-one(2); 1-Methyl-4- isopropenylcyclohexan-2-one; p- Menth-8(10)-en-2-one
07.129	3577		3720-16-9	3-Methyl-5-propylcyclohex-2-en-1-one	1-Methyl-5-n-propyl-1-cyclohexen-3-one;
07.130	3622		57378-68-4	delta-Damascone	1-(2,6,6-Trimethylcyclohex-3-enyl)but 2-en-1-one

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.131	3626	11060	17283-81-7	Dihydro-beta-ionone	4-(2,6,6-Trimethyl-2-cyclohexenyl)butan-2-one; 4-(2,6,6-Trimethylcyclohex-1-enyl)butan-2-one
07.132	3628	11059	31499-72-6	Dihydro-alpha-ionone	4-(2,6,6-Trimethylcyclohex-2-enyl)butan-2-one
07.133	3653		13171-00-1	4-Acetyl-6-tert-butyl-1,1-dimethylindane	Celestolide; 4-Acetyl-1,1-dimethyl-6-tert-butylindane; Acetyl-6-tert-butyl-2,3-dihydro-1,1-dimethylindane
07.134	3659	11053	43052-87-5	alpha-Damascone	4-(2,6,6-Trimethyl-2-cyclohexenyl)-2-butene-4-one; 1-(2,6,6-Trimethylcyclohex-2-enyl)but-2-en-1-one
07.135	3662	11884	28631-86-9	2,4-Dihydroxyacetophenone	1-Ethanone;
07.136	3715		34545-88-5	4,4a,5,6-Tetrahydro-7-methylnaphthalen-2(3H)-one	
07.137	3724	11808	2345-28-0	Pentadecan-2-one	Methyl tridecyl ketone;
07.138	3725		63759-55-7	2-Pentylbut-1-en-3-one	3-Methylene-2-octanone; 3-Methyleneoctan-2-one
07.139	3761		81925-81-7	5-Methylhept-2-en-4-one	2-Hepten-4-one, 5-methyl,;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.140	3763		1128-08-1	3-Methyl-2-pentylcyclopent-2-en-1-one	Dihydrojasmonone; 2-Pentyl-3-methyl-2-cyclopenten-1-one; 3-Methyl-2-(n-pentanyl)-2-cyclopentene-1-one;
07.142		11035	498-02-2	Acetovanillone	4-Hydroxy-3-methoxyacetophenone
07.146	2249	146	2244-16-8	d-Carvone	d-p-Mentha-1,8-dien-2-one
07.147	2249	146	6485-40-1	l-Carvone	l-p-Mentha-1,8-dien-2-one
07.148	3909	11047	108-94-1	Cyclohexanone	Cyclohexyl ketone; Hexanon; Ketoexamethylene;
07.149	3910	11050	120-92-3	Cyclopentanone	Ketocyclopentane; Ketopentamethylene;
07.150		11055	693-54-9	Decan-2-one	
07.151	3966	11056	928-80-3	Decan-3-one	
07.153	3776		20489-53-6	1,10-Dihydronootkatone	1,2,6-Trimethyl-9-isopropylene-bicyclo[4.4.0]decan-4-one
07.154		11106	5650-43-1	1-(3,5-Dimethoxy-4-hydroxyphenyl)propan-1-one	Propiosyringone; 3,5-Dimethoxy-4-hydroxypropiofenone;
07.157		11068	1604-34-8	6,10-Dimethylundecan-2-one	
07.158		11069	6175-49-1	Dodecan-2-one	
07.159	2479	551	4695-62-9	d-Fenchone	d-1,3,3-Trimethyl-2-norbornanone; 1,3,3-Trimethyl-bicyclo[2.2.1]heptan-2-one
07.160		11089	2922-51-2	Heptadecan-2-one	Methyl pentadecyl ketone;



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.164		11105	2478-38-8	4-Hydroxy-3,5-dimethoxyacetophenone	Acetosyringone;
07.167		11108	4984-85-4	4-Hydroxyhexan-3-one	
07.168	4143		490-03-9	(+/-)-2-Hydroxypiperitone	Piperitone, 2- hydroxy-; Diosphenol; Buccocamphor; 2- Hydroxy- 6- isopropyl- 3- methyl- 2- cyclohexen- 1- one
07.169		11101	116-09-6	1-Hydroxypropan-2-one	Hydroxyacetone; Acetyl carbinol;
07.170	4144	11202	23267-57-4	beta-Ionone epoxide	4-(1,2-Epoxy-2,6,6-trimethylcyclohexyl)but-3-en-2-one
07.171	4198	11125	18358-53-7	Isopinocampnone	2,6,6-Trimethyl-bicyclo[3.1.1]cycloheptan-3-one
07.172	3939	11127	500-02-7	4-Isopropylcyclohex-2-en-1-one	Cryptone; Crypton; 4- Isopropylcyclohex-2-enone; DL- Kryptone;
07.175	2910	2052	89-81-6	p-Menth-1-en-3-one	Piperitone; alpha-Piperitone; 1-Methyl- 4-isopropyl-1-cyclohexen-3-one;
07.176	2667	2035	89-80-5	trans-Menthone	trans-p-Menthan-3-one
07.177	3868		33046-81-0	7-Methyl-3-octenone-2	trans-7-Methyl-3-octen-2-one;
07.178		11131	563-80-4	3-Methylbutan-2-one	3-Methyl-1-butenol-2; Methyl isopropyl ketone;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.179	3946		583-60-8	2-Methylcyclohexanone	Methyl anone;
07.180	3947		591-24-2	3-Methylcyclohexanone	
07.181		11146	928-68-7	6-Methylheptan-2-one	
07.184	4057		113486-29-6	3-Methylnona-2,4-dione	3-Methyl-2,4-nonanedione
07.185		11157	565-61-7	3-Methylpentan-2-one	
07.187		11162	32064-72-5	Non-2-en-4-one	
07.188	3955	11163	14309-57-0	Non-3-en-2-one	
07.189		11161	4485-09-0	Nonan-4-one	
07.194		11182	2550-26-7	4-Phenylbutan-2-one	
07.195		11042	103-79-7	1-Phenylpropan-2-one	Benzyl methyl ketone;
07.196		11186	80-57-9	Pin-2-en-4-one	Verbenone; 4,6,6-Trimethyl- bicyclo[3.1.1]hept-3-en-2-one
07.198		11191	141-10-6	Pseudo-ionone	6,10-Dimethylundeca-3,5,9-trien-2-one
07.199		11192	2345-27-9	Tetradecan-2-one	
07.205		11205	502-69-2	6,10,14-Trimethylpentadecan-2-one	Hexahydrofarnesyl acetone;
07.215	2230	140	464-49-3	(1R)-1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one	d-Camphor;
07.219	3196	11786	6261-18-3	trans-3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one	trans-Jasmone;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
07.224	3243	2340	23726-91-2	tr-1-(2,6,6-Trimethyl-1-cyclohexen-1-yl)but-2-en-1-one	
07.225	3659	11053	23726-94-5	cis-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one	cis-alpha-Damascone;
07.236		11171	22610-86-2	5-Octen-2-one	
07.238	4139		37160-77-3	3-Hydroxy-2-octanone	2- Octanone, 3- hydroxy-
07.240	4000		13019-20-0	2-Methylheptan-3-one	
07.242	4052		5355-63-5	3-Hydroxy-4- phenylbutan-2- one	2-Butanone, 3-hydroxy-4-phenyl-
07.244	4001		20859-10-3	trans-6-Methyl-3-hepten-2-one	
07.247	4008		30086-02-3	Octadien-2-one/3.5-(E,E)	
07.248	4060		585-25-1	2,3-OCTANEDIONE	Octan-2,3-dione
07.249	4022		927-49-1	Undecan-6-one	
07.251	4316		577-16-2	2-Methylacetophenone	
08.001	2487	1	64-18-6	Formic acid	Methanoic acid;
08.002	2006	2	64-19-7	Acetic acid	Ethanoic acid; Ethylic acid; Methanecarboxilic acid;
08.003	2924	3	79-09-4	Propionic acid	Methylacetic acid; Ethylformic acid;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
08.004	2611	4	598-82-3	Lactic acid	alpha-Hydroxypropanoic acid; 2-Hydroxypropanoic acid
08.005	2221	5	107-92-6	Butyric acid	Ethylacetic acid; Butanoic acid; 1-Propanecarboxylic acid;
08.006	2222	6	79-31-2	2-Methylpropionic acid	Isobutyric acid; Isopropylformic acid; Butyric iso acid;
08.007	3101	7	109-52-4	Valeric acid	Pentanoic acid; Propylacetic acid; Valerianic acid; 1-Butanecarboxylic acid;
08.008	3102	8	503-74-2	3-Methylbutyric acid	Isopentanoic acid; beta-Methylbutyric acid; Delphinic acid; Active valeric acid; β-Methylbutyric acid;
08.009	2559	9	142-62-1	Hexanoic acid	Caproic acid; Hexoic acid; 2- Butylacetic acid; Pentylformic acid;
08.010	2799	10	124-07-2	Octanoic acid	Caprylic acid; Octoic acid; C-8; Octylic acid; 1-Heptanecarboxylic acid;
08.011	2364	11	334-48-5	Decanoic acid	Capric acid; Decylic acid; 1- Nonanecarboxylic acid;
08.012	2614	12	143-07-7	Dodecanoic acid	Lauric acid; Dodecoic acid; Laurostearic acid;
08.013	2815	13	112-80-1	Oleic acid	Oleinic acid; trans-Elaidic acid; Octadec-9-enoic acid

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
08.014	2832	14	57-10-3	Hexadecanoic acid	Palmitic acid; Hexadecylic acid; Cetylic acid; 1-Pentadecanecarboxylic acid;
08.015	3035	15	57-11-4	Octadecanoic acid	Stearic acid; Octadecylic acid;
08.016	2764	16	544-63-8	Tetradecanoic acid	Myristic acid; Crodacid;
08.017	2655	17	6915-15-7	l-Malic acid	2-Hydroxy-1,4-butanedioic acid; Hydroxysuccinic acid;; 2- Hydroxybutane-1,4-dioic acid
08.018	3044	18	133-37-9	Tartaric acid	Racemic acid; 2,3-Dihydroxysuccinic acid; 2,3-Dihydroxybutanedioic acid
08.019	2970	19	127-17-3	Pyruvic acid	2-Ketopropionic acid; Acetylformic acid; Alpha-Ketopropionoc acid; Pyroracemic acid; 2-Oxopropanoic acid
08.021	2131	21	65-85-0	Benzoic acid	Benzenecarboxylic acid; Phenylformic acid; Dracylic acid; Carboxybenzene; Phenyl carboxylic acid;
08.022	2288	22	621-82-9	Cinnamic acid	tert-beta-Phenylacrylic acid; 3-Phenyl- 2-propenoic acid; $\beta$ -Phenylacrylic acid; 3-Phenylacrylic acid; 3-Phenylprop-2-enoic acid

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
08.023	2627	23	123-76-2	4-Oxovaleric acid	Laevulinic acid; Acetopropionic acid; Laevulic acid; Levulinic acid; 4- Oxopentanoic acid; 3-Acetylpropionic acid;
08.024		24	110-15-6	Succinic acid	Butan-1,4-dioic acid; 1,2- Ethanedicarboxylic acid; Butanedioic acid
08.025	2488	25	110-17-8	Fumaric acid	Allomalenic acid; Boletic acid; tr- Butenedionic acid; tr-1,2- ethylenedicarboxylic acid; But-2(trans)-enedioic acid
08.026	2011	26	124-04-9	Adipic acid	1,4-Butanedicarboxylic acid; Hexanedioic acid
08.028	3348	28	111-14-8	Heptanoic acid	n-Heptanoic; Enanthic; n-Heptylic; n- Heptoic acid; Oenanthic; Oenanthic acid; n-Heptanoic acid; Enanthic acid;
08.029	2784	29	112-05-0	Nonanoic acid	Pelargonic acid; Octane-1-carboxylic acid; Nonylic acid; Nonoic acid;
08.031	2754	31	97-61-0	2-Methylvaleric acid	2-Methylpentanoic acid; Methylpropylacetic acid;
08.032	2889	32	501-52-0	3-Phenylpropionic acid	Benzylacetic acid; Hydrocinnamic acid; $\beta$ -Phenylpropionic acid; Dihydrocinnamic acid;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
08.033	2010	33	499-12-7	Prop-1-ene-1,2,3-tricarboxylic acid	Aconitic acid; Achilleic acid; Equisetic acid; Citridic acid; 2- Carboxyglutaconic acid;
08.034	2347	34	5292-21-7	Cyclohexylacetic acid	Cyclohexaneacetic acid;
08.035	3191	582	4536-23-6	2-Methylhexanoic acid	2-Methylcaproic acid; 2- Butylpropanoic acid; Hexana-2- carboxylic acid;
08.036	3142	616	502-47-6	Citronellic acid	Rhodinolic acid; Rhodinic acid; 3,7- Dimethyloct-6-enoic acid
08.037	3891	653	328-50-7	2-Oxoglutaric acid	alpha-Ketoglutaric acid; 2-Oxo-1,5- pentanedioic acid; 2-Ketoglutaric acid; 2-Oxopentanedioic acid
08.038	2878	672	103-82-2	Phenylacetic acid	alpha-Toluic acid; Benzylcarboxylic acid;
08.039	3247	689	112-38-9	Undec-10-enoic acid	Undecylenic acid; 10-Hendecenoic acid;
08.040	3986	693	99-96-7	4-Hydroxybenzoic acid	p-Hydroxybenzoic acid;
08.041	3380	694	60-33-3	Octadeca-9,12-dienoic acid	Linoleic acid; Linoleic and Linolenic acids;
08.042	3245	696	112-37-8	Undecanoic acid	n-Undecoic acid; n-Undecylic acid; Hendecanoic acid;
08.043	3988	697	121-34-6	Vanillic acid	4-Hydroxy-3-methoxy-benzoic acid; 4- Hydroxy-3-methoxybenzoic acid

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
08.044	3143	744	21016-46-6	2,4-Dimethylpent-2-enoic acid	
08.045	2429	2001	88-09-5	2-Ethylbutyric acid	alpha-Ethylbutyric acid; Diethylacetic acid;
08.046	2695	2002	116-53-0	2-Methylbutyric acid	Methylethyl acetic acid; Butane-2- carboxylic acid;
08.047	2706	2003	1188-02-9	2-Methylheptanoic acid	2-Methyloenanthic acid; Methylamylacetic acid; Isocaprylic acid; Isooctanoic acid;
08.048	2843	2004	591-80-0	Pent-4-enoic acid	Allyl acetic acid;
08.049	2872	2005	122-59-8	Phenoxyacetic acid	Glycollic acid phenyl ether; Phenoxyethanoic acid; o- Phenylglycolic acid;
08.050	3170	2256	4219-24-3	Hex-3-enoic acid	
08.051	3869	2262	759-05-7	3-Methyl-2-oxobutyric acid	2-Oxoisovaleric acid; Dimethylpyruvic acid;
08.052	3871	2263	816-66-0	4-Methyl-2-oxovaleric acid	2-Keto-4-methyl-pentanoic acid; 4- Methyl-2- oxopentanoic acid; alpha- Ketoisocaproic acid; Isopropyl pyruvic acid;
08.053		2264	141-82-2	Malonic acid	Methanedicarboxylic acid; Propane dioic acid; Propan 1,3-dioic acid; Propanedioic acid
08.054	3169	11777	13419-69-7	Hex-2(trans)-enoic acid	β-Propylacrylic acid; 3-Propylacrylic acid;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
08.055	3195	11680	3142-72-1	2-Methyl-2-pentenoic acid	3-Ethyl-2-methylacrylic acid; 2- Pentene-2-carboxylic acid; 2- Propylidinepropionic acid;
08.056	3437	10149	105-43-1	3-Methylvaleric acid	Sec-butyl acetic acid; 2-Methyl-butane- 1-carboxylic acid; $\beta$ -Methylvaleric acid;
08.057	3463	10150	646-07-1	4-Methylvaleric acid	Isohexanoic acid; Isocaproic acid; 4- Methyl pentanoic acid;
08.058	3464	10147	37674-63-8	2-Methylpent-3-enoic acid	
08.059	3511	10148	1575-74-2	2-Methylpent-4-enoic acid	
08.060	3531	11911	98-89-5	Cyclohexanecarboxylic acid	
08.061	3572	10142	628-46-6	5-Methylhexanoic acid	Isoheptanoic acid; Isovenanthic acid; Isoamyl acetic acid;
08.062	3574	11925	45019-28-1	4-Methylnonanoic acid	4-Methylpelargonic acid;
08.063	3575	11926	54947-74-9	4-Methyloctanoic acid	
08.064	3599	10168	80-59-1	2-Methylcrotonic acid	Tiglic acid; 2-Methyl crotonic acid; 2- Methyl-2-butenic acid; trans-2,3- Dimethyl-acrylic acid; Methylbut- 2(trans)-enoic acid
08.065	3660	10090	14436-32-9	Dec-9-enoic acid	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
08.066	3723		600-18-0	2-Oxobutyric acid	Ketobutyric acid; Alpha-Ketobutyric acid;
08.067	3731		71298-42-5	1,2,5,6-Tetrahydrocuminic acid	4-Isopropyl-3-cyclohexene-1- carboxylic acid; 3-Cyclohexene-1- carboxylic acid, 4-(1-methylethyl)-, (±)-; 1-(4-Isopropylcyclohex-3-enyl) carboxylic acid
08.068	3742		72881-27-7	Dec-(5- and 6)-enoic acid	
08.070	3187	10138	541-47-9	3-Methylcrotonic acid	3,3-Dimethyl-acrylic acid; 3-Methyl- but-2-enoic acid; β,β-Dimethylacrylic acid; Senecioic acid; 3-Methylbut- 2(trans)-enoic acid
08.071	3945	10077	100-09-4	p-Anisic acid	4-Anisic acid; Draconic acid; p- Methoxybenzoic acid; 4- Methoxybenzoic acid
08.072	3908	10080	3724-65-0	But-2-enoic acid (cis and trans)	Crotonic acid (trans) + isoCrotonic acid (cis);
08.073	3913	10087	3913-85-7	Dec-2-enoic acid	2-Decenoic acid;
08.074		10088	15469-77-9	Dec-3-enoic acid	3-decenoic acid;
08.075	3914	10089	26303-90-2	Dec-4-enoic acid	4-Decenoic acid;
08.076	3798		89-86-1	2,4-Dihydroxybenzoic acid	
08.079	3800		16493-80-4	4-Ethyl octanoic acid	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
08.080		10170	149-91-7	Gallic acid	3,4,5-Trihydroxybenzoic acid; 3,4,5-trihydroxybenzoic acid
08.081	4121	10094	459-80-3	Geranic acid	3,7- Dimethyl-2(trans),6-octadienoic acid; 3,7-dimethylocta-2,6-dienoic acid; 3,7-dimethyl-2(trans),6- Octadienoic acid
08.083		10102	18999-28-5	Hept-2-enoic acid	
08.085	3921		110-44-1	Hexa-2,4-dienoic acid	
08.086	3843		1113-60-6	3-Hydroxy-2-oxopropionic acid	Propanoic acid, 3-hydroxy-2-oxo-; 3- Hydroxy-2-oxopropanoic acid;
08.087		10111	530-57-4	4-Hydroxy-3,5- dimethoxybenzoic acid	Syringic acid;
08.089		10113	1135-24-6	4-Hydroxy-3-methoxycinnamic acid	Ferulic acid; 3-(4-Hydroxy-3- methoxyphenyl)prop-2-enoic acid
08.090		10118	498-36-2	2-Hydroxy-4-methylvaleric acid	
08.092	3944		586-38-9	3-Methoxybenzoic acid	m-Anisic acid; 3-Anisic acid;
08.093	3870	10146	39748-49-7	3-Methyl-2-oxovaleric acid	Methyl ethyl pyruvic acid; Sodium 3- methyl-2-oxopentanoic acid;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
08.099	4180		10321-71-8	(E,Z)-4-Methylpent-2-enoic acid	4- Methyl- 2- pentenoic acid
08.101	3954	10153	3760-11-0	Non-2-enoic acid	
08.102		10154	4124-88-3	Non-3-enoic acid	
08.103		10079	123-99-9	Nonanedioic acid	Azelaic acid;
08.107	4193	10163	13991-37-2	Pent-2-enoic acid	
08.108		10164	492-37-5	2-Phenylpropionic acid	hydratropic-acid-;
08.109	3892		156-06-9	3-Phenylpyruvic acid	3-Phenyl-2-oxopropanoic acid; 3-Oxo- 3-phenylpropanoic acid
08.112	3985	10165	69-72-7	Salicylic acid	2-Hydroxybenzoic acid; 2-Hydroxy- benzoic acid
08.113	3277	24	150-90-3	Succinic acid, disodium salt	
08.114	3957	10156	1871-67-6	2-Octenoic acid	trans-2-Octenoic acid; Oct-2-enoic acid
08.119	3169	11777	1191-04-4	2-Hexenoic acid	
08.120	3599	10168	13201-46-2	2-Methyl-2-butenic acid	
08.123	3920		10352-88-2	trans-2-Heptenoic acid	
09.001	2414	191	141-78-6	Ethyl acetate	Acetic ether,;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.002	2925	192	109-60-4	Propyl acetate	Propyl ethanoate;
09.003	2926	193	108-21-4	Isopropyl acetate	Propyl iso acetate;
09.004	2174	194	123-86-4	Butyl acetate	Butyl ethanoate,;
09.005	2175	195	110-19-0	Isobutyl acetate	Butyl iso acetate; 2-Methyl-1-propyl acetate; Iso-butyl acetate; 2- Methylpropyl acetate
09.006	2565	196	142-92-7	Hexyl acetate	Hexyl ethanoate; 1-Acetoxy-hexane,;
09.007	2806	197	112-14-1	Octyl acetate	Acetate C-8; n-Octanyl acetate; 2- Ethyl hexyl acetate; Octyl ethanoate;
09.008	2788	198	143-13-5	Nonyl acetate	Acetate C-9; Pelargonyl acetate; Nonyl ethanoate;
09.009	2367	199	112-17-4	Decyl acetate	Acetate C-10; Decyl ethanoate; Decanyl acetate; 1-Acetoxydecane; Acetic acid decyl ester; Decanol acetate;
09.010	2616	200	112-66-3	Dodecyl acetate	Lauryl acetate; Acetate C-12; Dodecanyl acetate; Lauryl ethanoate; Dodecanyl ethanoate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.011	2509	201	105-87-3	Geranyl acetate	Geraniol acetate; trans-3,7-Dimethyl-2,6-octadien-1-yl acetate; 2,6-Dimethyl-2,6-octadiene-8-yl acetate; 3,7-Dimethylocta-2(trans), 6-dienyl acetate
09.012	2311	202	150-84-5	Citronellyl acetate	3,7-Dimethyl-6-octen-1-yl acetate; 3,7-Dimethyl-6-octen-1-yl ethanoate; 3,7-Dimethyloct-6-enyl acetate
09.013	2636	203	115-95-7	Linalyl acetate	Bergamol; 3,7-Dimethyl-1,6-octadien-3-yl acetate; Licareol acetate; Linalool acetate; 1,5-Dimethyl-1-vinylhex-4-enyl acetate
09.014	2135	204	140-11-4	Benzyl acetate	Benzyl ethanoate;
09.015	3047	205	80-26-2	alpha-Terpinyl acetate	3-Cyclohexene-1-methanol, alpha,alpha, 4-trimethyl, acetate; p-Menth-1-en-8-yl acetate
09.016	2668	206	29066-34-0	Menthyl acetate	1-p-Menth-3-yl acetate; Menthol acetate; 1-Isopropyl-4-methylcyclohex-2-yl acetate; (1-alpha,2-beta,5-alpha)-2-Isopropyl-5-methylcyclohexyl acetate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.017	2159	207	76-49-3	Bornyl acetate	Borneol acetate; 2-Camphanyl acetate; Bornyl ethanoate; l-Bornyl acetate; d- Bornyl acetate; Bornyl acetic ether; 1,7,7-Trimethyl-bicyclo[2.2.1]hept-2- yl acetate
09.018	2293	208	103-54-8	Cinnamyl acetate	3-Phenyl-2-propen-1-yl acetate; 3- Phenylallyl acetate; 3-Phenylprop-2- enyl acetate
09.019	2098	209	104-21-2	p-Anisyl acetate	Benzenemethanol, 4-methoxy-, acetate; Anisyl alcohol, acetate; Benzyl alcohol, p-Methoxy, acetate; 4-Methoxybenzyl acetate
09.020	2469	210	93-28-7	Eugenyl acetate	Eugenol acetate; Aceteugenol; 2- Methoxy-4-phenyl acetate; Acetyl eugenol; 4-Allyl-2-methoxyphenyl acetate
09.021		211	628-63-7	Pentyl acetate	Amyl acetate;
09.022	2547	212	112-06-1	Heptyl acetate	Acetate C-7; Heptanyl acetate; Heptyl ethanoate,;
09.023	2676	213	79-20-9	Methyl acetate	Methyl ethanoate;
09.024	2055	214	123-92-2	Isopentyl acetate	Isoamyl acetate; beta-Methyl butyl acetate; Amyl acetate common; Amyl iso acetate; Isoamyl ethanoate; 3- Methylbutyl acetate
09.025	2425	215	10031-87-5	2-Ethylbutyl acetate	beta-Ethylbutyl acetate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.026	2064	216	7493-78-9	alpha-Pentylcinnamyl acetate	alpha-n-Amyl-beta-phenylacryl acetate; alpha-Pentylcinnamyl acetate; Floxin acetate; 2-Pentyl-3-phenylprop- 2-enyl acetate
09.027	2349	217	622-45-7	Cyclohexyl acetate	Cyclohexane acetate;
09.028	2348	218	21722-83-8	2-Cyclohexylethyl acetate	Cyclohexane ethyl acetate; Ethylcyclohexyl acetate; Hexahydrophenyl ethyl acetate;
09.029	2735	219	103-07-1	1,1-Dimethyl-3-phenylpropyl acetate	Dimethyl phenethyl carbonyl acetate; 1,1-Dimethyl-3-phenylpropan-1-yl acetate; 2-Methyl-4-phenyl-2-butyl acetate;
09.030	2470	220	93-29-8	2-Methoxy-4-(prop-1-enyl)phenyl acetate	Isoeugenyl acetate; Isoeugenol acetate; 2-Methoxy-4-propenyl phenyl acetate; Acetisoeugenol;
09.031	2857	221	103-45-7	Phenethyl acetate	2-Phenylethyl acetate; Benzyl carbonyl acetate;
09.032	2890	222	122-72-5	3-Phenylpropyl acetate	Phenylpropyl acetate; 3-phenyl-1-propyl acetate; Hydrocinnamyl acetate; beta-Phenylpropyl acetate;
09.033	2981	223	141-11-7	Rhodinylyl acetate	alpha-Citronellyl acetate; 3,7- Dimethyloct-7-enyl acetate
09.034	3007	224	1323-00-8	Santalyl acetate	alpha-Santalol, acetate; $\beta$ -Santalol, acetate;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.035	3108	225	881-68-5	Vanillyl acetate	Acetyl vanillin; Benzaldehyde, 4- (acetyloxy)-3-methoxy-; 3-Methoxy-4- acetoxybenzaldehyde; 4-Acetoxy-3- methoxybenzaldehyde
09.036	3073	226	140-39-6	p-Tolyl acetate	p-Cresyl acetate; 4-methylbenzoic acid methyl ester; Acetyl p-Cresol; p- Tolyl ethanoate; p-Cresylic acetate; 4- Methylphenyl acetate
09.037	2418	245	140-88-5	Ethyl acrylate	Ethyl propenoate; Ethyl prop-2-enoate
09.038	2693	263	623-42-7	Methyl butyrate	Methyl butanoate;
09.039	2427	264	105-54-4	Ethyl butyrate	Ethyl n-butanoate; Butyric ether; Ethyl butanoate;
09.040	2934	266	105-66-8	Propyl butyrate	Propyl butanoate;
09.041	2935	267	638-11-9	Isopropyl butyrate	Propyl iso butyrate; Propyl iso butanoate; Isopropyl butanoate;
09.042	2186	268	109-21-7	Butyl butyrate	Butyl butanoate;
09.043	2187	269	539-90-2	Isobutyl butyrate	Butyl iso butyrate; 2-Methyl-1-propyl butyrate; Isobutyl butanoate; 2- Methylpropyl butanoate
09.044	2059	270	540-18-1	Pentyl butyrate	Amyl butyrate; Amyl butanoate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.045	2568	271	2639-63-6	Hexyl butyrate	n-Hexyl n-butanoate; Hexyl butanoate;
09.046	2807	272	110-39-4	Octyl butyrate	Octyl butanoate,;
09.047	2368	273	5454-09-1	Decyl butyrate	Decyl butanoate; 1-Butyroxyl decane,;
09.048	2512	274	106-29-6	Geranyl butyrate	trans-3,7-Dimethyl-2,6-octadien-1-yl butanoate; 3,7-Dimethylocta-2(trans), 6-dienyl butanoate
09.049	2312	275	141-16-2	Citronellyl butyrate	3,7-Dimethyl-6-octen-1-yl butyrate; 3,7-Dimethyloct-6-enyl butanoate
09.050	2639	276	78-36-4	Linalyl butyrate	3,7-Dimethyl-1,6-octadien-3-yl butyrate; Linalyl n-butanoate; 1,5-Dimethyl-1-vinylhex-4-enyl butanoate
09.051	2140	277	103-37-7	Benzyl butyrate	Benzyl n-butanoate; Benzyl n-butanoate; Benzyl butanoate;
09.052	3049	278	2153-28-8	Terpinyl butyrate	p-Menth-1-en-8-yl butyrate; p-Menth-1-en-8-ol butyrate; p-Menth-1-en-8-yl butanoate
09.053	2296	279	103-61-7	Cinnamyl butyrate	Phenylpropenyl-n-butanoate; 3-Phenyl-2-propen-1-yl butanoate; Butyric acid, 3-phenyl-2-propen-1-yl ester; 3-Phenylprop-2-enyl butanoate
09.054	2021	280	2051-78-7	Allyl butyrate	Allyl-n-butanoate; Vinyl carbonyl butyrate; 2-Propen-1-yl butanoate; Allyl butanoate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.055	2060	282	106-27-4	3-Methylbutyl butyrate	Isoamyl butyrate; Isoamyl n-butyrate;
09.057	2891	285	80866-83-7	2-Phenylpropyl butyrate	alpha-Phenylpropyl alcohol, butyric ester; beta-methylphenethyl butyrate; Hydratropyl butyrate;
09.058	2100	286	6963-56-0	p-Anisyl butyrate	Benzyl alcohol, p-methoxy, butyrate; Butyric acid, p-methoxybenzyl ester; 4- Methoxybenzyl butanoate
09.059	2432	309	110-38-3	Ethyl decanoate	Ethyl caprate; Ethyl decylate; Ethyl caprinate;
09.060	2439	310	123-66-0	Ethyl hexanoate	Ethyl caproate; Capronic ether absolute; Ethyl capronate;
09.061	2949	311	626-77-7	Propyl hexanoate	Propyl caproate;
09.062	2950	312	2311-46-8	Isopropyl hexanoate	Propyl iso hexanoate; Propyl iso Hexylate; Isopropyl capronate; Isopropyl caproate;
09.063	2201	313	626-82-4	Butyl hexanoate	Butyl caproate;
09.064	2202	314	105-79-3	Isobutyl hexanoate	Isobutyl caproate; Butyl iso hexanoate; Butyl iso caproate; 2- Methylpropyl hexanoate
09.065	2074	315	540-07-8	Pentyl hexanoate	Amyl hexanoate; Amyl caproate; Pentyl caproate,;
09.066	2572	316	6378-65-0	Hexyl hexanoate	Hexyl caproate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.067	2515	317	10032-02-7	Geranyl hexanoate	Geranyl caproate; trans-3,7-Dimethyl- 2,6-octadien-1-yl hexanoate; 3,7- Dimethylocta-2(trans), 6-dienyl n- hexanoate
09.068	2643	318	7779-23-9	Linalyl hexanoate	3,7-Dimethyl-1,6-octadien-3-yl hexanoate; Linalyl caproate; Linalyl hexoate; Linelyl hexylate; 1,5-Dimethyl-1-vinylhex-4-enyl hexanoate
09.069	2708	319	106-70-7	Methyl hexanoate	Methyl caproate;
09.070	2075	320	2198-61-0	3-Methylbutyl hexanoate	Isoamyl hexanoate; Isoamyl caproate; Isopentyl n-hexanoate; Pentyl iso hexanoate; Pentyl iso caproate; Isopentyl hexanoate;
09.071	2896	321	6281-40-9	3-Phenylpropyl hexanoate	Hydrocinnamyl hexanoate; Hydrocinnamylcaproate; 3- Phenylpropyl caproate;
09.072	2434	339	109-94-4	Ethyl formate	Ethyl methanoate; Formic ether;
09.073	2943	340	110-74-7	Propyl formate	Propyl methanoate;
09.074	2552	341	112-23-2	Heptyl formate	n-Heptyl methanoate; Heptyl methanoate;
09.075	2809	342	112-32-3	Octyl formate	Octyl mehtanoate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.076	2514	343	105-86-2	Geranyl formate	trans-3,7-Dimethyl-2,6-octadien-1-yl formate; trans-3,7-Dimethyl-2,6-octadien-1-yl-methanoate; Geranyl methanoate; 3,7-Dimethylocta-2(trans),6-dienyl formate
09.077	2145	344	104-57-4	Benzyl formate	Formic acid benzyl ester; Benzyl methanoate;
09.078	2314	345	105-85-1	Citronellyl formate	3,7-Dimethyl-6-octen-1-yl formate; 3,7-Dimethyl-6-octen-1-yl methanoate; 3,7-Dimethyloct-6-enyl formate
09.079	2984	346	141-09-3	Rhodinyl formate	alpha-Citronellyl formate; 3,7-Dimethyloct-7-enyl formate
09.080	2642	347	115-99-1	Linalyl formate	3,7-Dimethyl-1,6-octadien-3-yl formate; Linalool formate; 1,5-Dimethyl-1-vinylhex-4-enyl formate
09.081	3052	348	2153-26-6	alpha-Terpinyll formate	p-Menth-1-en-8-yl formate;
09.082	2161	349	7492-41-3	Bornyl formate	Bornyl methanoate; Borneol formate; d-Bornyl formate; endo-2-Bornanyl formate; 2-Camphanyl formate; l-Bornyl formate; 1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl formate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.083	2864	350	104-62-1	Phenethyl formate	2-Phenylethyl formate; 2-Phenylethyl methanoate; Benzylcarbonyl formate; Benzylcarbonyl methanoate;
09.084	2895	351	104-64-3	3-Phenylpropyl formate	Phenylpropyl formate; Hydrocinnamyl formate; Hydrocinnamyl methanoate; beta-Phenylpropyl formate;
09.085	2299	352	104-65-4	Cinnamyl formate	3-Phenyl-2-propen-1-yl formate; 3-Phenylallyl formate; Cinnamyl methanoate; 3-Phenylprop-2-enyl formate
09.086	2395	353	10058-43-2	2-Methyl-1-phenyl-2-propyl formate	alpha,alpha-dimethylphenethyl formate; 2-Benzyl-2-propyl formate; Benzyl dimethyl carbonyl formate; Dimethyl benzyl carbonyl formate;
09.087	2101	354	122-91-8	p-Anisyl formate	Anisyl alcohol, formate; Anisyl methanoate; p-Methoxybenzyl methanoate; Benzenemethanol, 4-methoxy-, formate; 4-Methoxybenzyl formate
09.088	2473	355	10031-96-6	4-Eugenyl formate	Eugenol formate; 4-Allyl-2-methoxyphenyl formate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.089	2474	356	7774-96-1	Isoeugenyl formate	4-Methoxy-4-phenyl formate; 2- Methoxy-4-propenylphenyl formate; 2- Methoxy-4-(prop-1-enyl)phenyl formate
09.090	2066	357	7493-79-0	alpha-Pentylcinnamyl formate	alpha-n-Amyl-phenylacryl formate; alpha-Pentylcinnamyl formate; 2- Pentyl-3-phenylprop-2-enyl formate
09.091	2199	363	5454-28-4	Butyl heptanoate	Butyl heptylate; Butyl oenanthate,;
09.092	2200	364	7779-80-8	Isobutyl heptanoate	Isobutyl heptylate; Butyl iso heptanoat; Isobutyl heptoate; 2-Methyl- 1-propyl heptanoate; 2-Methylpropyl heptanoate
09.093	2437	365	106-30-9	Ethyl heptanoate	Ethyl heptylate; Ethyl heptoate; Ethyl oenanthate; Oenanthic ester;
09.094	2810	366	5132-75-2	Octyl heptanoate	Octyl heptylate; Octyl oenanthate,;
09.095	2948	367	7778-87-2	Propyl heptanoate	Propyl heptylate; Propyl heptoate; Propyl oenanthate;
09.096	2705	368	106-73-0	Methyl heptanoate	Methyl heptoate; Methyl oenanthate,;
09.097	2031	369	142-19-8	Allyl heptanoate	Allyl heptylate; Allyl heptoate; Allyl enanthate; Allyl oenanthate;
09.098	2073	370	7493-82-5	Pentyl heptanoate	Amyl heptanoate; Amyl heptylate; Amyl heptoate; Amyl oenanthate,;
09.099	2441	375	106-33-2	Ethyl dodecanoate	Ethyl laurate; Ethyl dodecylate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.100	2206	376	106-18-3	Butyl dodecanoate	Butyl laurate; Butyl dodecylate;
09.101	2715	377	111-82-0	Methyl dodecanoate	Methyl laurate; Methyl dodecylate,;
09.102	3076	378	10024-57-4	p-Tolyl dodecanoate	p-Cresyl dodecanoate; p-Cresyl laurate; p-Methylphenyl dodecanoate; 4-Methylphenyl dodecanoate
09.103	2077	379	6309-51-9	3-Methylbutyl dodecanoate	Isoamyl laurate; Isoamyl dodecanoate; Amyl iso laurate; Pentyl iso laurate; Isopentyl laurate,;
09.104	2445	385	124-06-1	Ethyl tetradecanoate	Ethyl myristate;
09.105	3556	386	110-27-0	Isopropyl tetradecanoate	Isopropyl myristate;
09.106	2722	387	124-10-7	Methyl tetradecanoate	Methyl myristate;
09.107	2447	388	123-29-5	Ethyl nonanoate	Ethyl pelargonate; Ethyl nonylate;
09.108	2724	389	1731-84-6	Methyl nonanoate	Methyl nonylate; Methyl pelargonate,;
09.109	2036	390	7493-72-3	Allyl nonanoate	2-Propenyl nonanoate; Allyl pelargonate; Allyl nonylate; 2- Propenyl pelargonate;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.110	2078	391	7779-70-6	3-Methylbutyl nonanoate	Isoamyl pelargonate; Pentyl iso nonanoate; Isopentyl nonanoate; Amyl iso nonanoate; Isopentyl nonylate; Isoamyl nonylate;
09.111	2449	392	106-32-1	Ethyl octanoate	Ethyl caprylate; Ethyl octylate;
09.112	2079	393	638-25-5	Pentyl octanoate	Amyl octanoate; Amyl caprylate; Amyl octylate; Pentyl octylate,;
09.113	2575	394	1117-55-1	Hexyl octanoate	Hexyl caprylate; Hexyl octylate,;
09.114	2811	395	2306-88-9	Octyl octanoate	Octyl octylate;
09.115	2790	396	7786-48-3	Nonyl octanoate	Nonyl octylate;
09.116	2644	397	10024-64-3	Linalyl octanoate	3,7-Dimethyl-1,6-octadien-3-yl octanoate; Linalyl caprylate; Linalyl octoate; Linalyl octylate; 1,5-Dimethyl- 1-vinylhex-4-enyl octanoate
09.117	2728	398	111-11-5	Methyl octanoate	Methyl octylate;
09.118	2553	399	4265-97-8	Heptyl octanoate	Heptyl caprylate;
09.119	2037	400	4230-97-1	Allyl octanoate	Allyl caprylate; 2-Propenyl octanoate; 2-Propenyl octylate; Allyl octylate;
09.120	2080	401	2035-99-6	3-Methylbutyl octanoate	Isoamyl octanoate; Isopentyl octanoate; Pentyl iso octanoate; Isoamyl caprylate; Isopentyl octylate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.121	2456	402	105-37-3	Ethyl propionate	Ethyl propanoate; Propionic ether;
09.122	2958	403	106-36-5	Propyl propionate	Propyl propanoate; n-Propyl propionate;
09.123	2959	404	637-78-5	Isopropyl propionate	Propyl iso propionate,;
09.124	2211	405	590-01-2	Butyl propionate	Butyl propanoate;
09.125	2212	406	540-42-1	Isobutyl propionate	Butyl iso propionate; Isobutyl propanoate; 2-Methylpropyl propanoate
09.126	2813	407	142-60-9	Octyl propionate	Octyl propanoate;
09.127	2369	408	5454-19-3	Decyl propionate	Decyl propanoate; 1-Propionoxy decane,;
09.128	2517	409	105-90-8	Geranyl propionate	trans-3,7-Dimethyl-2,6-octadien-1-yl propanoate; 2,6-Dimethyl octadien-6-yl-8-n-propionate; 3,7-Dimethylocta- 2(trans), 6-dienyl propanoate
09.129	2316	410	141-14-0	Citronellyl propionate	3,7-Dimethyloct-6-enyl propanoate
09.130	2645	411	144-39-8	Linalyl propionate	3,7-Dimethyl-1,6-octadien-3-yl propanoate; 3,7-Dimethyl-1,6- octadien-3-yl propionate; 1,5-Dimethyl-1-vinylhex-4-enyl propanoate
09.131	2163	412	2756-56-1	Isobornyl propionate	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl propanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.132	2150	413	122-63-4	Benzyl propionate	Benzyl propanoate; Benzylpropanoate;
09.133	2301	414	103-56-0	Cinnamyl propionate	3-Phenyl-2-propen- 1-yl propanoate; gamma-Phenylallyl propionate; 3- Phenylprop-2-enyl propanoate
09.134	2742	415	554-12-1	Methyl propionate	Methyl propanoate;
09.135		416	624-54-4	Pentyl propionate	Pentyl propanoate; Amyl propionate,;
09.136	2082	417	105-68-0	3-Methylbutyl propionate	Isoamyl propionate; Isopentyl propionate; Isopentyl propanoate; Isoamyl propanoate,;
09.137	2867	418	122-70-3	Phenethyl propionate	Phenylethyl propionate; 2-Phenylethyl propanoate; Benzylcarbinyl propionate;
09.138	2897	419	122-74-7	3-Phenylpropyl propionate	Phenylpropyl propionate; Hydrocinnamyl propionate; beta- Phenylpropyl propanoate; 3-Phenylpropyl propanoate;
09.139	2576	420	2445-76-3	Hexyl propionate	Hexyl propanoate;
09.140	2354	421	6222-35-1	Cyclohexyl propionate	
09.141	2986	422	105-89-5	Rhodinyl propionate	alpha-Citronellyl propionate; 3,7- Dimethyloct-7-enyl propanoate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.142	3053	423	80-27-3	Terpinyl propionate	p-Menthanyl propionate (mixed isomers - according to FEMA); p- Menth-1-en-8-yl propionate; p- Menth- 1-en-8-yl propanoate
09.143	2251	424	97-45-0	Carvyl propionate	l-Carveol propionate; p-Mentha-6,8- dien-2-yl propionate; p-Mentha-6,8- dien-2-yl propanoate
09.144	2689	425	120-45-6	l-Phenethyl propionate	alpha-Methylbenzyl propionate; 1- Phenyl-1-ethyl propionate; Methyl phenylcarbinyl propionate;
09.145	2102	426	7549-33-9	p-Anisyl propionate	Benzenemethanol, 4-methoxy-, propionate; 4-Methoxybenzyl propanoate
09.146	2044	441	7493-76-7	Allyl undec-10-enoate	Allyl undecylenate; 2-Propenyl 10- undecenoate; Allyl hendecenoate; Allyl undecylenoate.;
09.147	2462	465	539-82-2	Ethyl valerate	Ethyl pentanoate; Ethyl valerianate;
09.148	2217	466	591-68-4	Butyl valerate	Butyl valerianate; Butyl pentanoate,;
09.149		467	2173-56-0	Pentyl valerate	Amyl pentanoate; Amyl valerate,;
09.150	4123	468	10402-47-8	Geranyl valerate	Geranyl pentanoate; 2,6-Dimethyl-2,6- octadiene-8-yl pentanoate; 3,7- Dimethylocta-2(trans),6-dienyl pentanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.151	2317	469	7540-53-6	Citronellyl valerate	3,7-Dimethyl-6-octen-1-yl pentanoate; 3,7-Dimethyloct-6-enyl pentanoate
09.152		470	10361-39-4	Benzyl valerate	Benzyl valerate; Benzyl pentanoate; Phenyl methyl pentanoate;
09.153	2164	471	7549-41-9	Bornyl valerate	Bornyl pentanoate; Bornyl valerianate; Bornyl n-pentanoate; endo-2- Camphanyl valerate; endo-2-Bornyl valerate; 1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl pentanoate
09.154	4156	472	89-47-4	Menthyl valerate	Menthyl pentanoate; p-Menthan-3-yl pentanoate
09.156	2726	479	111-80-8	Methyl 2-nonynoate	Methyl octine carbonate; Methyl octyne carbonate;
09.157	2448	480	10031-92-2	Ethyl 2-nonynoate	Ethyl octyne carbonate; Ethyl octyne carboxylate; Ethyl non-2-ynoate; Ethyl hexyl propiolate;
09.158	2729	481	111-12-6	Methyl 2-octynoate	Methyl heptine carbonate; Methyl heptyne carbonate; Methyl oct-2- ynoate; Methyl pentylpropiolate;
09.159	2068	497	638-49-3	Pentyl formate	Amyl formate; Amyl formiat; Amyl methanoate; n-Pentyl methanoate;
09.160	2353	498	4351-54-6	Cyclohexyl formate	
09.161	2570	499	629-33-4	Hexyl formate	n-Hexyl formate; Hexyl methanoate; Formic acid hexyl ester;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.162	2069	500	110-45-2	3-Methylbutyl formate	Isoamyl formate; Isopentyl formate; Amyl iso formate; Pentyl iso formate; Isopentyl methanoate; Amyl iso methanoate; Isoamyl methanoate;
09.163	2196	501	592-84-7	Butyl formate	Butyl methanoate;
09.164	2197	502	542-55-2	Isobutyl formate	Tetryl formate; Butyl iso formate; Isobutyl methanoate; 2-Methyl-1-propyl formate; 2-Methylpropyl formate
09.165	2944	503	625-55-8	Isopropyl formate	Propyl iso formate; Propyl iso Methanoate; Isopropyl methanoate;
09.166	2549	504	5870-93-9	Heptyl butyrate	Heptyl butanoate;
09.167	2774	505	999-40-6	Neryl butyrate	cis-3,7-Dimethyl-2,6-octadien-1-yl butanoate; 3,7-Dimethyl-2(cis), 6- octadienyl butanoate
09.168	2861	506	103-52-6	Phenethyl butyrate	beta-Phenethyl n-butanoate; 2- Phenylethyl butanoate; 2-Phenylethyl butyrate; Benzylcarbonyl butyrate;
09.169	2777	509	105-91-9	Neryl propionate	cis-3,7-Dimethyl-2,6-octadien-1-yl propionate; 3,7-Dimethyl-2(cis), 6- octadienyl propanoate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.171		527	77-54-3	Cedryl acetate	2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undecan-8-yl acetate
09.174	3687	552	613-70-7	2-Methoxyphenyl acetate	Guaiacyl acetate; 1-Acetoxy-2- methoxybenzene; Acetyl guaiacol; o- Methoxyphenyl acetate;
09.176	2162	565	1200-67-5	Isobornyl formate	Isobornyl methanoate; exo-2-bornyl formate; exo-2-Camphanyl formate; 1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl formate
09.177	2678	572	7149-29-3	2-Methylallyl butyrate	2-Methyl-2-propen-1-yl butyrate; 2- Methylallyl butanoate; Isopropenyl carbinyl-n-butyrate; Methylallyl butyrate; 2-Methylprop-2-enyl butanoate
09.178	2684	573	93-92-5	1-Phenethyl acetate	Styryllyl acetate; alpha-Phenylethyl acetate; methyl phenylcarbinyl acetate; sec-Phenylethyl acetate; 1-Phenylethyl acetate
09.179	2688	574	7775-38-4	1-Phenethyl formate	alpha-Methylbenzyl formate; 1-Phenyl- 1-ethyl formate; Alpha-Methylbenzyl methanoate;
09.180		581	112-39-0	Methyl hexadecanoate	Methyl palmitate;
09.181	2709	583	13894-63-8	Methyl hex-2-enoate	Methyl $\beta$ -Propylacrylate;
09.182	2752	588	624-24-8	Methyl valerate	Methyl pentanoate; Methyl valerianate,;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.185		607	592-20-1	2-Oxopropyl acetate	Acetonyl acetate;
09.186	3526	608	4906-24-5	sec-Butan-3-onyl acetate	2-Acetoxy-3-butanone; AMC acetate; Acetoin acetate; Acetyl methyl carbinyl acetate; 2-Butanon-3-yl acetate; 1-Methyl-2-oxopropyl acetate
09.188		611	5933-87-9	Pentyl decanoate	Amyl caprate; Amyl caprinate;
09.189	2424	628	10031-86-4	1-Phenylpropyl butyrate	alpha-Ethylbenzyl butyrate; Ethyl phenyl carbinyl butyrate; 1-Phenyl-1-propyl butyrate; alpha-Phenylpropyl butyrate;
09.191	3342		2396-83-0	Ethyl hex-3-enoate	
09.192	2450	633	111-62-6	Ethyl oleate	Ethyl cis-9-Octadecenoate; Ethyl octadec-9-enoate
09.193	2451	634	628-97-7	Ethyl hexadecanoate	Ethyl palmitate; Ethyl cetylrate;
09.194	2459	635	2396-84-1	Ethyl hexa-2,4-dienoate	Ethyl sorbate; Ethyl 2,4-hexadienoate;
09.196	2564	643	10094-40-3	Hex-2-enyl acetate	trans-2-Hexenyl acetate; 2-Hexen-1-yl acetate; 2-Hexenyl ethanoate;
09.197	3171	644	3681-71-8	Hex-3(cis)-enyl acetate	cis-3-Hexen-1-yl acetate; cis-3-hexenyl acetate; cis-3-Hexenyl ethanoate;
09.198		648	2050-09-1	Isopentyl valerate	Isoamyl pentanoate; 3-Methylbutyl pentanoate



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.200	2882	671	10415-88-0	1-Methyl-3-phenylpropyl acetate	Methyl phenyl ethyl carbonyl acetate; 4- Phenyl-2-butyl acetate; Phenylethyl methyl carbonyl acetate;
09.201		673	7460-74-4	Phenethyl valerate	Phenethyl pentanoate;
09.202		679	141-06-0	Propyl valerate	Propyl pentanoate; Propyl valerate;
09.204		711	544-35-4	Ethyl octadeca-9,12-dienoate	Ethyl linoleate;
09.205		712	1191-41-9	Ethyl octadeca-9,12,15-trienoate	Ethyl linolenate;
09.208		741	142-77-8	Butyl oleate	Butyl octadec-9-enoate
09.209		742	589-75-3	Butyl octanoate	Butyl caprylate;
09.210	3490	745	111-61-5	Ethyl octadecanoate	Ethyl stearate;
09.211	2223	747	60-01-5	Glyceryl tributyrate	Tributylin; Glycerol tributyrate; Butylin;
09.212	2776	2060	2142-94-1	Neryl formate	cis-3,7-Dimethyl-2,6-octadien-1-yl formate; cis-3,7-Dimethyl-2,6- octadien-1-yl methanoate; 3,7-Dimethyl-2(cis), 6-octadienyl formate
09.213	2773	2061	141-12-8	Neryl acetate	cis-3,7-Dimethyl-2,6-octadien-1-yl acetate; cis-3,7-Dimethyl-2,6-octadien- 1-yl ethanoate; 3,7-Dimethyl-2(cis), 6- octadienyl acetate
09.214	3096	2062	112-19-6	Undec-10-enyl acetate	Acetate C-11; 10-Hendecyl acetate; Undecylenic acetate; Undecenyl acetate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.215	2250	2063	97-42-7	Carvyl acetate	Carveyl acetate; p-Mentha-6,8-dien-2-yl acetate; p-Mentha-6,8-dien-2-yl acetate
09.216	2380	2064	20777-49-5	Dihydrocarvyl acetate	6-Methyl-3-(1-methylvinyl)cyclohexyl acetate; Dihydrocarveyl acetate; 8-p- Menthen-2-yl acetate; 6-Methyl-3- isopropenylcyclohexenyl acetate; p-Menth-8-en-2-yl acetate
09.218	2160	2066	125-12-2	Isobornyl acetate	Bornyl iso acetate; exo-2-Camphanyl acetate; Isobornyl ethanoate; exo-2- Bornyl acetate; 1,7,7- Trimethylbicyclo[2.2.1]hept-2-yl acetate
09.219	2965	2067	57576-09-7	Isopulegyl acetate	5-Methyl-2-isopropenylcyclohexyl acetate; Pulegol iso acetate; 1-Methyl- 4-isopropenylcyclohexan-3-yl acetate; p-Menth-8-en-3-yl acetate
09.220	2912	2068	326-61-4	Piperonyl acetate	Heliotropyl acetate; 3,4-Methylene dioxybenzyl acetate; 1,3- Benzodioxole-5-methanol,acetate; 3,4-Methylenedioxybenzyl acetate
09.225	2783	2075	1322-17-4	1,3-Nonanediol acetate	1,3-Nonanediol acetate (mixed esters); Acetoxynonyl acetate (mixed esters); Jasmonyl; Nonan-1,3-diyl acetate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.227	2392	2077	151-05-3	1,1-Dimethyl-2-phenethyl acetate	2-Methyl-1-phenyl-2-propyl acetate; Benzyl dimethyl carbonyl acetate; Dimethylbenzyl carbonyl acetate;
09.228	3072	2078	533-18-6	o-Tolyl acetate	Acetyl o-Cresol; o-Cresol acetate; o-Cresyl acetate; o-Cresylic acetate; 2-Methylphenyl acetate
09.230	2351	2082	1551-44-6	Cyclohexyl butyrate	Cyclohexyl butanoate;
09.231	2686	2083	3460-44-4	1-Phenethyl butyrate	alpha-Methylbenzyl butyrate; Methyl phenyl carbonyl butyrate; Styrallyl butyrate; 1-Phenyl-1-ethyl butanoate; 1-Phenylethyl butyrate
09.232	2394	2084	10094-34-5	1,1-Dimethyl-2-phenethyl butyrate	2-Methyl-1-phenyl-2-propyl butyrate; Benzyl dimethyl carbonyl butyrate; alpha,alpha-dimethylphenethyl butyrate;
09.233	2040	2094	2408-20-0	Allyl propionate	2-Propenyl propanoate; Allyl propanoate;
09.234	2725	2099	111-79-5	Methyl non-2-enoate	Methyl nonylenate; Methyl nonylenoate;
09.235	2194	2100	7492-45-7	Butyl dec-2-enoate	
09.236	2750	2101	5760-50-9	Methyl undec-9-enoate	Methyl undecylenate;
09.237	2461	10634	692-86-4	Ethyl undec-10-enoate	Ethyl undecylenate;
09.238	2216	2103	109-42-2	Butyl undec-10-enoate	Butyl undecylenate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.239	2751	2111	10522-18-6	Methyl 2-undecynoate	Methyl decyne carbonate; Methyl decine carbonate; Methyl undec-2-ynoate; Methyl octyl propiolate;
09.240	3353	2153	33467-73-1	Hex-3(cis)-enyl formate	beta,gamma-Hexenyl methanoate; (Z)- 3-hexenol formate; Leaf alcohol formate; 3-Hexenyl methanoate;
09.244	2032	2181	123-68-2	Allyl hexanoate	Allyl caproate; 2-Propenyl hexanoate;
09.246	2214	2189	123-95-5	Butyl octadecanoate	Butyl stearate;
09.247	4072	2222	20474-93-5	Allyl crotonate	Allyl but-2(trans)-enoate
09.248	3486	2244	623-70-1	Ethyl trans-2-butenoate	Ethyl crotonate;
09.249	3197	2276	68922-11-2	1-Methyl-2-phenethyl butyrate	1-Phenyl-2-propyl butyrate; alpha-Methylphenethyl butyrate;
09.250		2303	10588-10-0	Isobutyl valerate	Isobutyl pentanoate; 2-Methylpropyl pentanoate
09.251		2304	110-42-9	Methyl decanoate	
09.253		2308	528-79-0	2-Isopropyl-5-methylphenyl acetate	Thymyl acetate; Acetyl thymol;
09.254	3583	2347	4864-61-3	3-Octyl acetate	1-Ethyl hexyl acetate; n-Amyl ethyl carbonyl acetate; 1-Ethylhexyl acetate
09.256		2351	6513-03-7	Propyl nonanoate	Propyl pelargonate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.258	2524	2525	3891-59-6	Glucose pentaacetate	1,2,3,4,6-Pentaacetyl-alpha-d- Glucose; 1,2,3,4,6-Pentaacetyl-beta-d- Glucose; alpha-Pentaacetyl-dextro- Glucose; 1,2,3,4,6-Pentaacetyl-alpha-d glucose and 1,2,3,4,6-pentaacetyl-beta- d-glucose
09.260	3148	10574	3025-30-7	Ethyldeca-2(cis),4(trans)-dienoate	Ethyl (2E,4Z)-decadienoate;
09.261	3221	10882	6290-37-5	2-Phenethyl hexanoate	2-Phenylethyl caproate; 2-Phenylethyl hexanoate; Benzylcarbiny caproate; Benzylcarbiny hexanoate;
09.262	3222	10884	5457-70-5	Phenethyl octanoate	2-Phenylethyl caprylate; Benzylcarbiny octanoate;
09.263	3286	10657	139-45-7	Glyceryl tripropionate	Propionic acid, triglyceride; Tripropionin;
09.264	3332	10525	84642-61-5	sec-Butan-3-onyl butyrate	Acetoxy butyrate; AMC butyrate; 1- Methyl-2-oxopropyl butanoate
09.265	3344	10619	34495-71-1	Ethyl oct-4-enoate	
09.266	3354	10688	19089-92-0	Hexyl 2-butenate	
09.267	3364	10801	2396-78-3	Methyl hex-3-enoate	O-Hexylhexanolide;
09.268	3367	10834	21063-71-8	Methyl oct-4(cis)-enoate	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.269	3390	11769	13851-11-1	Fenchyl acetate	1,3,3-Trimethyl-2-norbornanyl acetate; 1,3,3-trimethyl- bicyclo[2.2.1]heptan-2-yl acetate
09.270	3402	11859	16491-36-4	Hex-3-enyl butyrate	$\beta$ ,gamma-Hexenyl n-butyrate; cis-3- Hexenyl-butanoate;
09.271	3403	11779	31501-11-8	Hex-3-enyl hexanoate	3-Hexenyl caproate; cis-3-Hexenyl caproate;
09.272	3405	10858	72928-52-0	Myrtenyl formate	2-Pinen-10-ol formate; (6,6-Dimethylbicyclo[3.3.1]hept-2-en-2- yl)methyl formate
09.273	3432	10706	589-66-2	Isobutyl crotonate	2-Methylpropyl but-2(trans)-enoate
09.274	3492	10633	627-90-7	Ethyl undecanoate	Ethyl undecylate, Ethyl hendecanoate;
09.275	3493	10662	1576-77-8	Hept-3(trans)-enyl acetate	
09.276	3516	11906	3913-80-2	Oct-2-enyl acetate	2-Octen-1-ol,acetate,(E)-;
09.277	3517	11907	84642-60-4	Oct-2(trans)-enyl butyrate	trans-2-Octenyl butyrate;
09.278	3561	10742	15111-96-3	p-Mentha-1,8-dien-7-yl acetate	Perilla acetate; Perrilyl acetate; Perillyl acetate; Acetic acid, perillyl ester; Menthadien-7-carbinyl acetate;
09.280	3579	11927	67715-81-5	Nonane-1,4-diyl diacetate	Nonanediol-1,4 acetate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.281	3582	11716	2442-10-6	Oct-1-en-3-yl acetate	Octenyl acetate; Amyl vinyl carbinyl acetate; 3-Acetoxyoctene; Amyl crotonyl acetate; Pentyl crotonyl acetate; 1-Vinylhexyl acetate
09.282	3612		16491-54-6	Oct-1-en-3-yl butyrate	1-Vinylhexyl butyrate
09.283	3641	10577	7367-88-6	Ethyl dec-2-enoate	
09.284	3642	10578	76649-16-6	Ethyl dec-4-enoate	
09.285	3643	10617	7367-82-0	Ethyl oct-2(trans)-enoate	
09.286	3644	10762	624-41-9	2-Methylbutyl acetate	
09.287	3648	10889	28316-62-3	Propyl deca-2,4-dienoate	
09.288	3652		3572-06-3	4-(4-Acetoxyphenyl)butan-2-one	
09.289	3657		36789-59-0	alpha-Campholene acetate	1-Acetoxy-2-(2,2,3)-trimethyl-3-cyclopentenyl ethane; 2-(2,2,3-Trimethylcyclopent-3-enyl)ethyl acetate
09.290	3682		69925-33-3	Ethyl octa-4,7-dienoate	Ethyl Z 4,7-octadienoate;
09.291	3689		61444-38-0	Hex-3-enyl hex-3-enoate	Z-3-Hexenyl Z-3-hexenoate;
09.292	3692		33855-57-1	Hexyl 2-hexenoate	Hexyl E-2-hexenoate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.293	3701		52789-73-8	1-Acetoxy- 1-acetylcyclohexane	Methyl 1-acetoxycyclohexyl; 1-Acetylcyclohexyl acetate;
09.294	3702		17373-93-2	2-Methylbenzyl acetate	
09.298	3710		13481-87-3	Methyl non-3-enoate	
09.299	3712	11800	7367-81-9	Methyl oct-2(trans)-enoate	Methyl E-2-octenoate;
09.300	3714		689-89-4	Methyl hexa-2,4-dienoate	Methyl sorbate; Methyl 2,4- hexadienoate; Methyl E,E-2,4 Hexadienoate;
09.301	3733		59558-23-5	p-Tolyl octanoate	o-Cresyl octanoate; p-Methylphenyl octanoate; p-Cresyl caprylate; 4- Methylphenyl octanoate
09.302	3765	10887	1079-01-2	Myrtenyl acetate	2-Pinen-10-ol acetate; (6,6-Dimethylbicyclo[3.3.1]hept-2-en-2- yl)methyl acetate
09.303	4126	10664	253596-70-2	Hept-2-enyl isovalerate	Hept-2-enyl 3-methylbutanoate
09.304		10806		sec-Heptyl isovalerate	1- Methylhexyl 3-methylbutanoate
09.305	3844	10702	22030-19-9	beta-Ionyl acetate	beta-Ionol acetate; 3-Buten-2-ol, 4- (2,6,6-trimethyl-1-cyclohexen-1-yl)-, acetate; 4-(2,2,6-Trimethylcyclohex-1- enyl)but-3-en-2-yl acetate
09.306		10752		2-Methoxycinnamyl acetate	3-(2-Methoxyphenyl)prop-2-enyl acetate



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.307		10766	нет CAS	2-Methylbutyl dodecanoate	
09.312	2041	2182	7493-75-6	Allyl hexa-2,4-dienoate	Allyl Sorbate;
09.313		10523	56423-40-6	Benzyl 2-methylbutyrate	
09.316	4026	10521	6938-45-0	Benzyl hexanoate	
09.319	3907		13109-70-1	Bornyl butyrate	Bornyl butanoate; Butyric acid, 2- bornyl ester; 1,7,7-Trimethyl- bicyclo[2.2.1]heptan-2-yl butanoate
09.323		10527	105-46-4	sec-Butyl acetate	But-2-yl acetate; 1-Methylpropyl acetate
09.325		10528	819-97-6	sec-Butyl butyrate	But-2-yl butyrate; 1-Methylpropyl butanoate
09.326		10529	28369-24-6	Butyl deca-2,4-dienoate	
09.327		10530	30673-36-0	Butyl decanoate	Butyl caprate;
09.328		10532	589-40-2	sec-Butyl formate	But-2-yl formate; 1-Methylpropyl formate
09.332		10533	820-00-8	sec-Butyl hexanoate	But-2-yl caproate; 2-Butyl hexanoate; 1-Methylpropyl hexanoate
09.335		10536	57403-32-4	Butyl oct-2-enoate	
09.345		10555	818-04-2	Di-isopentyl succinate	Di-isoamyl succinate; Di(3- methylbutyl) succinate; Di-(3- Methylbutyl)butanedioate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.351		10551	141-05-9	Diethyl maleate	2- Butenedioic acid diethyl ester; Ethyl maleate; Diethyl but-2(cis)- enedioate
09.352		10549	624-17-9	Diethyl nonanedioate	Diethyl azelate;
09.355		10859	20777-49-5	neo-Dihydrocarvyl acetate	p-Menth-8(9)-en-2-yl acetate
09.358		10899	20780-49-8	3,7-Dimethyloctyl acetate	Tetrahydrogeranyl acetate;
09.365		10610	638-10-8	Ethyl 3-methylcrotonate	Ethyl senecioate; Ethyl 3-methylbut- 2(trans)- enoate
09.368		10615	6849-18-9	Ethyl 4-methylpent-3-enoate	
09.370		10579	67233-91-4	Ethyl dec-9-enoate	
09.371	3832	10576	78417-28-4	Ethyl deca-2,4,7-trienoate	Ethyl deca-2,4,7-trienoate; 2,4,7- Decatrienoic acid, ethyl ester;
09.372		10584	28290-90-6	Ethyl dodec-2-enoate	
09.377		10618	1117-65-3	Ethyl oct-3-enoate	
09.379		10623	2445-93-4	Ethyl pent-2-enoate	
09.380		10622	41114-00-5	Ethyl pentadecanoate	
09.382	4122		68705-63-5	(E)-Geranyl 2-methylbutyrate	Butanoic acid, 2- methyl-, (2E)- 3,7- dimethyl- 2,6-octadienyl ester; Butanoic acid, 2- methyl-, 3,7- dimethyl- 2,6- octa-dienyl ester, (E) -; Geranyl 2- methylbutanoate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.383	4044	11829	7785-33-3	Geranyl 2-methylcrotonate	Geranyl tiglate; 3,7-Dimethyl- 2(trans),6-octadienyl 2-methylbut- 2(trans)-enoate
09.385		10661	16939-73-4	Hept-2-enyl acetate	
09.387		10668	50862-12-9	Heptyl 2-methylbutyrate	
09.388		10802	5921-82-4	sec-Heptyl acetate	1-Methylhexyl acetate
09.390		10666	6976-72-3	Heptyl hexanoate	
09.391		10805	6624-58-4	sec-Heptyl hexanoate	1-Methylhexyl hexanoate
09.392		10667	56423-43-9	Heptyl isovalerate	Heptyl 3-methylbutanoate
09.394	2564	643	2497-18-9	Hex-2(trans)-enyl acetate	trans-2-Hexenyl acetate; 2-Hexen-1-yl acetate;
09.395	3932	11830	53398-80-4	Hex-2(trans)-enyl propionate	2-Hexenyl propanoate; (E)-Hex-2-enyl propionate; trans-2-Hexenyl propionate;
09.396	3926		53398-83-7	Hex-2-enyl butyrate	
09.397	3927	11858	53398-78-0	Hex-2-enyl formate	(E)-Hex-2-enyl formate; trans-2- Hexenyl formate;
09.398	3983		16630-55-0	3-(Methylthio)propyl acetate	Hexanoic acid, (2E)-2-hexenyl ester; trans-2-Hexenyl caproate; trans-2- Hexenyl hexanoate '(E)-2-Hexenyl hexanoate
09.399	3930		35154-45-1	Hex-2-enyl isovalerate	Hex-2-enyl 3-methylbutanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.401	3551	227	2308-18-1	Isopentyl acetoacetate	3-Methylbutyl acetoacetate; Pentyl 3-Oxobutanoate; Isoamyl Beta- ketobutyrate; 3-Methylbutyl 3- oxobutanoate
09.402	2415	240	141-97-9	Ethyl acetoacetate	Ethyl acetylacetate; Ethyl beta- Ketobutyrate; Acetoacetic ester; Ethyl 3-oxobutanoate
09.403	2176	241	591-60-6	Butyl acetoacetate	Butyl 3-ketobutanoate; Butyl 3- Ketobutyrate; Butyl 3-oxobutanoate
09.404	2177	242	7779-75-1	Isobutyl acetoacetate	Isobutyl-beta-ketobutyrate; Isobutyl-3-oxobutanoate; 2-Methyl-1-propyl acetoacetate; Isobutyl 3- ketobutanoate; 2-Methylpropyl 3-oxobutanoate
09.405	2510	243	10032-00-5	Geranyl acetoacetate	Geranyl 3-oxobutanoate; Geranyl beta-ketobutyrate; trans-3,7-Dimethyl-2,6- octadien-1-yl acetoacetate; 3,7- Dimethylocta-2(trans),6-dienyl 3- oxobutanoate
09.406	2136	244	5396-89-4	Benzyl 3-oxobutyrate	Benzyl acetylacetate; Benzyl 3- Oxobutanoate; Benzyl β-Ketobutyrate;
09.407	2869	246	42078-65-9	2-Phenethyl 3-methylcrotonate	2-Phenylethyl 3-methyl-2-butenate; 2-Phenethyl senecioate; Phenethyl 3,4-dimethylacrylate; 2-Phenylethyl 3- methylbut-2(trans)-enoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.408	2180	247	7779-81-9	Isobutyl 2-methylbut-2(cis)- enoate	Isobutyl angelate; Butyl iso angelate; Butyl iso cis-2-methyl-2-butenate; 2- Methylpropyl 2-methylbut-2(cis)- enoate
09.409	2443	265	7452-79-1	Ethyl 2-methylbutyrate	Ethyl 2-methylbutanoate;
09.410	2029	281	7493-69-8	Allyl 2-ethylbutyrate	2-Propenyl 2-ethylbutanoate; 2- Propenyl 2-ethylbutyrate;
09.411	2024	283	7493-65-4	Allyl cyclohexanebutyrate	Allyl 4-cyclohexylbutyrate; 2-Propen- 1-yl cyclohexanebutyrate; Allyl hexahydrophenylbutyrate; Allyl cyclohexylbutyrate;
09.412	2694	287	547-63-7	Methyl isobutyrate	Methyl dimethylacetate; Methyl-2-methylpropionate; Methyl 2- methylpropanoate
09.413	2428	288	97-62-1	Ethyl isobutyrate	Ethyl isobutanoate; Ethyl 2- methylpropanoate; Propanoic acid, 2- methyl-, ethyl ester; Ethyl-2-methylpropanoate
09.414	2936	289	644-49-5	Propyl isobutyrate	Propyl 2-methylpropanoate
09.415	2937	290	617-50-5	Isopropyl isobutyrate	Propyl iso isobutyrate; Isopropyl 2-methylpropanoate; Propyl iso 2-methylpropanoate; Isopropyl 2-methylpropanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.416	2188	291	97-87-0	Butyl isobutyrate	Butyl-2-methylpropionate; n-Butyl 2-methylpropanoate; Isobutyl 2- methylpropanoate
09.417	2189	292	97-85-8	Isobutyl isobutyrate	Isobutyl 2-methylpropionate; Butyl iso 2-Methylpropanoate; 2-Methyl-1- propyl 2-methylpropanoate; Isobutyl 2- methylpropanoate; 2-Methylpropyl 2- methylpropanoate
09.418		293	2445-72-9	Pentyl isobutyrate	Amyl isobutyrate; Amyl isobutyrate; Pentyl 2-methylpropanoate
09.419	3507	294	2050-01-3	Isopentyl isobutyrate	Isopentyl-2-methyl propanoate; 3- Methylbutyl 2-methylpropanoate
09.420	2550	295	2349-13-5	Heptyl isobutyrate	Heptyl 2-methylpropanoate; Heptyl 2-methylpropanoate
09.421	2313	296	97-89-2	Citronellyl isobutyrate	Citronellyl 2-methylpropionate; 3,7- Dimethyl-6-octen-1-yl isobutyrate; 3,7- Dimethyl-6-octen-1-yl 2- methylpropanoate; 3,7-Dimethyloct-6- enyl 2-methylpropanoate
09.423	2640	298	78-35-3	Linalyl isobutyrate	Linalyl 2-methylpropionate; 3,7- Dimethyl-1,6-octadien-3-yl isobutyrate; Linalool isobutyrate; 1,5- Dimethyl-1-vinylhex-4-enyl 2-methylpropanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.424	2775	299	2345-24-6	Neryl isobutyrate	2-cis-3,7-Dimethyl-2,6-octadien-1-yl isobutyrate; 3,7-Dimethyl-2(cis), 6- octadienyl 2- methylpropanoate
09.425	3050	300	7774-65-4	Terpinyl 2-methylpropionate	Terpinyl isobutyrate; 1-Methyl-1-(4- methylcyclohex-3-enyl)ethyl 2- methylpropionate; p-Menth-1-en-8-yl isobutyrate
09.426	2141	301	103-28-6	Benzyl isobutyrate	Benzyl 2-methylpropanoate; Benzyl-2- methylpropanoate
09.427	2862	302	103-48-0	Phenethyl isobutyrate	2-Phenethyl isobutyrate; 2- Phenylethyl isobutyrate; Benzylcarbonyl 2-methylpropanoate; Phenethyl 2-methylpropanoate; 2- Phenylethyl 2- methylpropanoate
09.428	2893	303	103-58-2	3-Phenylpropyl isobutyrate	Hydrocinnamyl isobutyrate; Hydrocinnamyl 2- methylpropanoate; 3- Phenylpropyl 2- methylpropanoate
09.429	3075	304	103-93-5	p-Tolyl isobutyrate	p-Cresyl isobutyrate; p-Methylphenyl 2- methylpropanoate; p-Methylphenyl isobutyrate; p-Tolyl 2- methylpropanoate; 4-Methylphenyl 2- methylpropanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.430	2913	305	5461-08-5	Piperonyl isobutyrate	Piperonyl 2-methylpropionate; 3,4-Methylenedioxybenzyl-2- methylpropanoate; Heliotropyl-2- methylpropanoate; 3,4-Methylenedioxybenzyl 2- methylpropanoate
09.431	2513	306	2345-26-8	Geranyl isobutyrate	Geranyl 2-methylpropionate; trans-3,7-Dimethyl-2,6-octadien-1-yl isobutyrate; 3,7-Dimethylocta- 2(trans), 6-dienyl 2- methylpropanoate
09.432	2721	322	2412-80-8	Methyl 4-methylvalerate	Methyl 4-methylpentanoate; Methyl isocaproate, Methyl isobutylacetate;
09.433	2440	371	97-64-3	Ethyl lactate	Ethyl alpha-hydroxypropionate; Ethyl 2-hydroxypropanoate
09.434	2205	372	138-22-7	Butyl lactate	Butyl alpha-hydroxypropionate; Butyl hydroxypropanoate; Butyl 2- hydroxypropanoate
09.435	2442	373	539-88-8	Ethyl 4-oxovalerate	Ethyl laevulinate; Ethyl 4- ketovalerate; Ethyl acetylpropanoate; Ethyl laevulate; Ethyl levulinate;
09.436	2207	374	2052-15-5	Butyl 4-oxovalerate	Butyl laevulinate; Butyl 4- ketovalerate; Butyl 4-oxopentanoate; Butyl acetylpropionate;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.439	2374	382	7554-12-3	Diethyl malate	Diethylhydroxysuccinate; Ethyl malate; Diethyl 2- hydroxybutanedioate
09.441	2195	384	17373-84-1	Butyl ethyl malonate	Ethyl butyl maloate; Butyl ethyl propanedioate
09.442	2457	430	617-35-6	Ethyl pyruvate	Ethyl acetylformate; Ethyl alpha-Ketopropionate; Ethyl pyrroacetate; Ethyl 2-oxopropanoate
09.443	2083	431	7779-72-8	Isopentyl pyruvate	Isoamyl 2-oxopropanoate; 3- Methylbutyl 2-oxopropanoate
09.444	2377	438	123-25-1	Diethyl succinate	Diethyl butanedionate; Diethyl ethanedicarboxylate; Ethyl succinate; Diethyl butanedioate
09.445	2396	439	106-65-0	Dimethyl succinate	Dimethyl butanedionate; Methyl succinate; Dimethyl butanedioate
09.446	2378	440	87-91-2	Diethyl tartrate	Diethyl 2,3-dihydroxybutanedioate; Ethyl tartrate; Diethyl 2,3- dihydroxysuccinate; Diethyl 2,3- dihydroxybutanedioate
09.447	2463	442	108-64-5	Ethyl isovalerate	Ethyl $\beta$ -methylbutyrate; Ethyl isopentanoate; Ethyl 3- methylbutanoate
09.448	2960	443	557-00-6	Propyl isovalerate	Propyl isovalerianate; Propyl 3- methylbutanoate; Propyl isopentanoate; Propyl 3- methylbutyrate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.449	2218	444	109-19-3	Butyl isovalerate	Butyl isovalerianate; Butyl isopentanoate; Butyl-3- methylbutanoate
09.450	2961	445	32665-23-9	Isopropyl isovalerate	Propyl iso isovalerate; Isopropyl isovalerianate; Isopropyl isopentanoate; Isopropyl 3- methylbutanoate
09.451	2814	446	7786-58-5	Octyl isovalerate	Octyl isovalerianate; Octyl isopentanoate; Octyl 3- methylbutyrate; Octyl 3- methylbutanoate
09.452	2791	447	7786-47-2	Nonyl isovalerate	Nonyl isovalerianate; Nonyl isopentanoate; Nonyl 3- methylbutanoate
09.453	2518	448	109-20-6	Geranyl isovalerate	Geranyl 3-methylbutyrate; trans-3,7- Dimethyl-2,6-octadien-1-yl isopentanoate; 3,7- Dimethylocta- 2(trans), 6-dienyl 3- methylbutanoate
09.454	2646	449	1118-27-0	Linalyl isovalerate	Linalyl 3-methylbutyrate; 3,7- Dimethyl-1,6- octadien-3-yl isovalerate; Linalyl isopentanoate; Linalyl isovalerianate; 1,5-Dimethyl-1- vinylhex-4-enyl 3-methylbutanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.455	2669	450	16409-46-4	Menthyl isovalerate	p-Menth-3-yl isovalerate; Menthyl isovalerianate; 1-Isopropyl-4- methylcyclohex-2-yl 3- methylbutanoate; 2-Isopropyl-5- methylcyclohexanyl 3- methylbutanoate
09.456	2165	451	76-50-6	Bornyl isovalerate	Bornyl 3-methylbutyrate; Bornyl isovalerianate; Bornyl isopentanoate; 1,7,7-Trimethyl- bicyclo[2.2.1]hept-2- yl 3-methylbutanoate
09.457	2166	452	7779-73-9	Isobornyl isovalerate	Isobornyl 3-methylbutyrate; Isobornyl isovalerianate; Bornyl iso isovalerate; Bornyl iso isopentanoate; 1,7,7- Trimethylbicyclo[2.2.1]hept-2-yl 3- methylbutanoate
09.458	2152	453	103-38-8	Benzyl isovalerate	Benzyl isovalerianate; Benzyl isopentanoate; Benzyl 3-methyl butanoate
09.459	2302	454	140-27-2	Cinnamyl isovalerate	Cinnamyl-3-methylbutyrate; Cinnamyl isovalerianate; 3-Phenylallyl isovalerate; 3- Phenyl-2-propen-1-yl 3- methylbutanoate; 3- Phenylprop-2-enyl 3-methylbutanoate
09.460		455	68922-10-1	Citronellyl isovalerate	Citronellyl isopentanoate; 3,7- Dimethyloct-6- enyl 3- methylbutanoate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.461	3054	456	1142-85-4	Terpinyl isovalerate	p-Menth-1-en-8-yl isovalerate; Terpinyl isopentanoate; p-Menth-1-en- 8-yl 3-methylbutyrate; p-Menth-1-en- 8-yl 3-methylbutanoate
09.462	2753	457	556-24-1	Methyl isovalerate	Methyl iso valerianate, Methyl $\beta$ - methyl butyrate; Methyl 3- methylbutanoate
09.463	2085	458	659-70-1	3-Methylbutyl 3-methylbutyrate	Isoamyl isopentanoate; Isopentyl isopentanoate; iso amyl $\beta$ -methyl butyrate;
09.464	2355	459	7774-44-9	Cyclohexyl isovalerate	Cyclohexyl isovalerianate; Cyclohexyl isopentanoate; Cyclohexyl-3- methylbutanoate
09.465	2987	460	7778-96-3	Rhodinyl isovalerate	alpha-Citronellyl isopentanoate; 3,7-Dimethyloct-7-enyl 3- methylbutanoate
09.466	2871	461	140-26-1	Phenethyl isovalerate	Phenylethyl isopentanoate; 2- Phenylethyl isovalerate; Benzylcarbonyl 3-methylbutanoate; 2-Phenylethyl 3-methylbutanoate
09.467	2899	462	5452-07-3	3-Phenylpropyl isovalerate	Hydrocinnamyl isovalerate; 3- Phenylpropyl isovaleriate; Hydrocinnamyl 3-methylbutanoate; 3- Phenylpropyl isopentanoate; 3- Phenylpropyl 3-methylbutanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.468	2067	463	7493-80-3	alpha-Pentylcinnamyl isovalerate	alpha-Amylcinnamyl 3- methylbutyrate; alpha-n- Amyl-beta- phenylacryl isovalerate; Floxin isovalerate; 2-Pentyl-3-phenylprop-2- enyl 3- methylbutanoate
09.469	2027	474	7493-68-7	Allyl cyclohexanevalerate	Allyl 5-cyclohexylpentanoate; Allyl cyclohexanepentanoate; 2-Propen-1-yl cyclohexanevalerate;
09.470	2297	496	103-59-3	Cinnamyl isobutyrate	Cinnamyl-2-methylpropionate; Cinnamyl 2- methylpropanoate; 3- Phenyl-2-propen-1-yl isobutyrate; 3- Phenylprop-2-enyl 2- methylpropanoate
09.471	2778	508	3915-83-1	Neryl isovalerate	Neryl beta-methylbutyrate; Neryl 3- methylbutyrate; Neryl isovalerianate; cis-3,7- Dimethyl-2,6-octadien-1-yl isopentanoate; 3,7- Dimethyl-2(cis), 6- octadienyl 3-methylbutanoate
09.472	3369	568	589-59-3	Isobutyl isovalerate	2-Methylpropyl 3-methylbutanoate
09.473	2808	593	109-15-9	Octyl isobutyrate	Octyl 2-methylpropanoate
09.474	2373	622	109-43-3	Dibutyl sebacate	Butyl sebacate; Dibutyl decanedioate; Dibutyl 1,8-octanedicarboxylate; Dibutyl decane-1,10- dioate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.475	2376	623	110-40-7	Diethyl sebacate	Diethyl 1,8-octanedicarboxylate; Ethyl sebacate; Diethyl decanedioate
09.476	2423	627	94-02-0	Ethyl 3-phenyl-3-oxopropionate	Ethyl benzoylacetate; Ethyl 3-phenyl- 3-oxopropionate; Ethyl beta-Keto- beta-phenylpropionate;
09.478	3172	646	2349-07-7	Hexyl isobutyrate	Hexyl 2-methylpropanoate
09.480	3753	681	36438-54-7	o-Tolyl isobutyrate	2-Methylphenyl 2-methylpropanoate
09.481		710	105-58-8	Diethyl carbonate	
09.482	2023	2070	4728-82-9	Allyl cyclohexaneacetate	Allyl cyclohexylacetate; 2-Propen-1-yl cyclohexaneacetate;
09.483	2719	2085	868-57-5	Methyl 2-methylbutyrate	Methyl methylethylacetate, Methyl-2-methylbutanoate;
09.484	2736	2086	10031-71-7	1,1-Dimethyl-3-phenylpropyl isobutyrate	Dimethyl phenethyl carbonyl isobutyrate; 2-Methyl-4-phenyl-2- butyl isobutyrate; 2-Methyl-4-phenyl- 2-butyl-2-methylpropanoate; 1,1-Dimethyl-3-phenylpropyl 2- methylpropanoate
09.485	2892	2087	65813-53-8	2-Phenylpropyl isobutyrate	2-Methyl-2-phenylethyl 2- methylpropanoate; 2-Alpha- Phenylpropyl alcohol, isobutyric ester; Hydratropyl isobutyrate; 2- Phenylpropyl 2-methylpropanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.486	2687	2088	7775-39-5	1-Phenethyl isobutyrate	alpha-Methylbenzyl isobutyrate; Styrallyl isobutyrate; Methyl phenyl carbinyl butyrate; 1-Phenyl-1-ethyl 2- Methylpropanoate; Methyl phenylcarbinyl isobutyrate; 1-(2- Phenylethyl) 2-methylpropanoate
09.487	2873	2089	103-60-6	2-Phenoxyethyl isobutyrate	2-Phenoxyethyl 2-methylpropanoate; Ethylene glycol monophenyl ether, isobutyrate; Phenylcellosolve isobutyrate; 2-Phenoxyethyl-2-methylpropanoate
09.488	2431	2095	10094-36-7	Ethyl cyclohexanepropionate	Ethyl 3-cyclohexylpropionate; Ethyl hexahydrophenylpropionate;
09.489	2045	2098	2835-39-4	Allyl isovalerate	2-Propenyl isopentanoate; Allyl isopentanoate; Allyl isovalerianate; 2- Propenyl 3-methylbutanoate; Allyl 3- methylbutanoate
09.490	2375	2106	105-53-3	Diethyl malonate	Ethyl malonate; Malonic ester; Ethyl propanedioate; Ethyl methanedicarboxylate; Diethyl propanedioate
09.491	2190	2107	7492-70-8	Butyl-O-butyryllactate	Butyl butyrolactate; Butyl-alpha- butyroxy propionate; Butyl 2- (propylcarboxy) propanoate; Butyl 2- butanoyloxypropanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.492	2025	2180	7493-66-5	Allyl cyclohexanehexanoate	Allyl 3-cyclohexylhexanoate; Allyl hexahydrophenylhexanoate; Allyl cyclohexanecaproate;
09.493	2043	2183	7493-71-2	Allyl 2-methylcrotonate	Allyl tiglate; Allyl-trans-2,3- dimethylacrylate; Allyl-trans-2-methyl- 2-butenolate; Allyl-2-methyl-crotonate; Allyl 2-methylbut-2(trans)-enoate
09.494	3330	2184	37526-88-8	Benzyl 2-methylcrotonate	Benzyl tiglate; Benzyl trans-2,3- dimethyl acrylate; Benzyl trans-2- methyl crotonate; Benzyl 2-methylbut- 2(trans)-enoate
09.495	2460	2185	5837-78-5	Ethyl 2-methylcrotonate	Ethyl tiglate; Ethyl trans-2,3-dimethyl acrylate; Ethyl (trans)-2- Methylcrotonate; Tiglic acid ethyl ester; Ethyl 2-methylbut-2(trans)- enoate
09.496	2870	2186	55719-85-2	Phenethyl 2-methylcrotonate	Phenethyl tiglate; 2-Phenylethyl tiglate; 2-Phenylethyl trans-2,3- dimethylacrylate; 2-Phenylethyl trans- 2-methylbutenoate; 2-Phenylethyl 2- methylbut-2(trans)-enoate
09.498	2026	2223	2705-87-5	Allyl cyclohexanepropionate	Allyl 3-cyclohexylpropionate; 2- Propen-1-yl cyclohexanepropionate; Allyl hexahydrophenylpropionate;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.499		2224	25415-62-7	Pentyl isovalerate	Amyl isopentanoate; Pentyl 3- methylbutyrate; Pentyl-3-methyl butanoate; n-Amyl isovalerianate; Pentyl 3-methylbutanoate
09.501	2416	2241	620-79-1	Ethyl 2-acetyl-3- phenylpropionate	Ethyl 2-benzylacetoacetate; Ethyl 2-acetyldihydrocinnamate; Ethyl alpha-acetylhydrocinnamate;
09.502		2242	71662-27-6	Ethyl butyryl lactate	Ethyl O-butyryllactate; Ethyl 2-(butoxycarbonyl)propanoate
09.505	3498	2344	10032-11-8	Hex-3-enyl isovalerate	3-Hexenyl isopentanoate; 3-Hexenyl isovalerate; Hex-3-enyl 3- methylbutanoate
09.506	3497	2345	10094-41-4	Hex-3-enyl 2-methylbutyrate	3-Hexenyl 2-methylbutyrate; cis-3- Hexenyl-a-methylbutyrate; Hex-3-enyl 2-methylbutanoate;
09.507	3499	4132	10032-15-2	Hexyl 2-methylbutyrate	
09.508	2143	11868	7492-69-5	Benzyl 2,3-dimethylcrotonate	Benzyl methyltiglate; Benzyl 2,3- dimethyl-2-butenolate; Benzyl-2,3- dimethylbut-2(trans)-enoate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.509	2388	11828	7774-60-9	1-Methyl-1-phenethyl isobutyrate	Dimethyl phenyl carbinyl isobutyrate; Phenylpropan-2-yl 2- methylpropionate; alpha,alpha- Dimethylbenzyl isobutyrate; 2- Phenylpropan-2-yl 2- methylpropanoate; 1- Methyl-1-(2- phenylethyl) 2-methylpropanoate
09.510	2417	11845	1321-30-8	Ethyl aconitate	Triethyl aconitate; Ethyl 1-propene-1,2,3-tricarboxylate; Ethyl 2-carboxyglutaconate; Triethyl propene-1,2,3-tricarboxylate
09.511	3080		77-90-7	Tributyl acetylcitrate	Acetyl tributylcitrate; Tributyl 2- acetoxy- 1,2,3-propanetricarboxylate
09.512	3083	11762	77-93-0	Triethyl citrate	Ethyl citrate; Triethyl 2-hydroxy-1,2,3-propanetricarboxylate
09.513	3229	10733	1733-25-1	Isopropyl 2-methylcrotonate	Propyl iso tiglate, Isopropyl tiglate; Propyl iso alpha-Methylcrotonate; Isopropyl alpha-Methylcrotonate; Isopropyl 2-methylbut-2(trans)-enoate
09.514	3278	11903	13246-52-1	Ethyl 2,4-dioxohexanoate	Ethyl propionylpyruvate; Ethyl-2,4-diketocaproate; ethyl propionyl pyruvate;
09.515	3339	11667	73019-14-4	Geranyl 2-ethylbutyrate	3,7-Dimethyl-2(trans),6-octadienyl 2-ethylbutanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.516	3359	10773	2445-78-5	2-Methylbutyl 2-methylbutyrate	2-Methylbutyl 2-methylbutanoate;
09.517	3361	10781	2270-60-2	Methyl citronellate	Methyl-3,7-dimethyl-oct-6-enoate; Methyl 3,7-dimethyloct-6-enoate
09.518	3387	10545	55066-56-3	4-Methylphenyl isovalerate	p-Cresyl isopentanoate; 4- Methylphenyl 3-methylbutyrate; p- Tolyl isovalerate; p-Tolyl-3-methyl butyrate; 4-Methylphenyl 3-methylbutanoate
09.519	3393	10534	15706-73-7	Butyl 2-methylbutyrate	
09.520	3408	10785	24851-98-7	Methyl 3-oxo-2-pentyl-1-cyclopentylacetate	Hedione; Methyl dihydrojasmonate; Methyl 2-pentyl-3-oxo-1-cyclopentyl- acetate; Jasmonic acid, (E)-dihydro-, methyl ester;
09.521	3410	10821	39924-52-2	Methyl 3-oxo-2-pent-2-enyl-1-cyclopentylacetate	Methyl jasmonate; 2-Pentenyl cyclopentanone-3-acetic acid, methyl ester; Methyl(2-pent-2-enyl-3-oxo-1- cyclopentyl)acetate;
09.522	3428	10596	5405-41-4	Ethyl 3-hydroxybutyrate	Ethyl 3-hydroxybutanoate; Ethyl Beta-hydroxybutyrate;
09.523	3452	10563	6624-71-1	Dodecyl isobutyrate	Dodecyl 2-methyl-propanoate; Lauryl isobutyrate; Lauryl 2- methylpropionate; Dodecyl 2-methylpropanoate
09.524	3456	10612	1617-23-8	Ethyl 2-methylpent-3-enoate	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.525	3462	10739	65416-14-0	Maltyl isobutyrate	2-Methyl-4-pyrone-3-yl 2-methylpropanoate; Maltyl 2-methylpropanoate; 2-Methyl-4H-pyran-4-one-3-yl 2-methylpropanoate
09.526	3488	10616	39255-32-8	Ethyl 2-methylvalerate	Ethyl 2-methylpentanoate;
09.527	3489	10613	53399-81-8	Ethyl 2-methylpent-4-enoate	
09.528	3494	10663	67801-45-0	trans-3-Heptenyl isobutyrate	Hept-3(trans)-enyl isobutyrate; Hept-3(trans)-enyl 2-methylpropanoate
09.529	3500	10692	10032-13-0	Hexyl isovalerate	Hexyl isopentanoate; Hexyl isovalerianate; Hexyl 3-methylbutanoate
09.530	3505	10721	27625-35-0	Isopentyl 2-methylbutyrate	Isoamyl 2-methylbutanoate; Isopentyl 2-methylbutanoate; Iso-Amyl 2-methylbutanoate; 3-Methylbutyl 2-methylbutanoate
09.531	3506	10772	2445-77-4	2-Methylbutyl isovalerate	2-Methylbutyl isopentanoate; 2-Methylbutyl 3-methylbutanoate
09.532	3508	10812	21188-58-9	Methyl 3-hydroxyhexanoate	Methyl 3-hydroxycaproate; Methyl beta-hydroxycaproate; Methyl beta-hydroxyhexanoate;
09.533	3543	10571	105-95-3	Ethyl brassylate	Ethylene glycol brassylate, cyclic diester; Ethylene brassylate; Ethylene undecane dicarboxylate; 1,4-Dioxacycloheptadecan-5,17-dione

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.534	3544	11916	3289-28-9	Ethyl cyclohexanecarboxylate	
09.535	3545	11764	2305-25-1	Ethyl 3-hydroxyhexanoate	
09.536	3568	11920	4630-82-4	Methyl cyclohexanecarboxylate	
09.537	3604	10866	29811-50-5	Octyl 2-methylbutyrate	
09.538	3632	10883	24817-51-4	Phenethyl 2-methylbutyrate	2-Phenylethyl 2-methylbutanoate; Benzylcarbiny 2-methylbutyrate; beta- Phenethyl alpha-methylbutanoate;
09.539	3676		94133-92-3	Oct-3-yl 2-methylcrotonate	Oct-3-yl tiglate; 1-Ethylhexyl 2- methyl-2-butenoate; 1-Ethylhexyl 2- methylcrotonate; 3-Octyl tiglate; 1- Ethylhexyl 2-methylbut-2(trans)-enoate
09.540	3678		60523-21-9	Ethyl 2-methylpenta-3,4- dienoate	
09.541	3679		5870-68-8	Ethyl 3-methylvalerate	
09.542	3683		3249-68-1	Ethyl 3-oxohexanoate	Ethyl beta-ketohexanoate;
09.543	3685	10648	26446-31-1	Glyceryl 5-hydroxydecanoate	
09.544	3686	10649	26446-32-2	Glyceryl 5-hydroxydodecanoate	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.545	3690	10681	61931-81-5	Hex-3-enyl lactate	Hex-3-enyl 2-hydroxypropanoate
09.546	3693		58625-95-9	Hexyl-2-methylpent-(3 and 4)- enoate	
09.547	3699		66576-71-4	Isopropyl 2-methylbutyrate	
09.548	3706		40348-72-9	Methyl 2-hydroxy-4- methylvalerate	Methyl 2-hydroxyisocaproate;
09.549	3707		2177-77-7	Methyl 2-methylvalerate	Methyl 2-methylvalerate;
09.550	3713		3682-42-6	Methyl 2-oxo-3-methylvalerate	Methyl 2-keto-3-methylpentanoate; Methyl 2-keto-3-methylvalerate; Methyl 3-methyl-2-oxovalerate;
09.551	3748		59259-38-0	l-Menthyl lactate	5-Methyl-2-(1-methylethyl)cyclohexyl alpha-hydroxypropanoate; l-p- Menthan-3-yl lactate;
09.552	3767	10650	91052-69-6	3-Oxodecanoic acid glyceride	Glyceryl beta-ketodecanoate; Glyceryl monoester of 3-oxodecanoic acid;
09.553	3768	10651	91052-70-9	3-Oxododecanoic acid glyceride	Glyceryl beta-ketododecanoate; Glyceryl monoester of 3- oxododecanoic acid;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.554	3769	10652	91052-71-0	3-Oxoheptadecanoic acid glyceride	Glyceryl beta-ketoheptadecanoate; Glyceryl monoester of 3- oxoheptadecanoic acid;
09.555	3770	10653	91052-72-1	3-Oxohexanoic acid glyceride	Glyceryl beta-ketohexanoate; Glyceryl diester of 3-oxohexanoic acid;
09.556	3771	10654	91052-68-5	3-Oxooctanoic acid glyceride	Glyceryl beta-ketooctanoate; Glyceryl monoester of 3-oxooctanoic acid;
09.557	3772	10655	91052-73-2	3-Oxotetradecanoic acid glyceride	Glyceryl beta-ketotetradecanoate; Glyceryl monoester of 3- oxotetradecanoic acid;
09.558		11754	108-59-8	Dimethyl malonate	Dimethyl azelate; Dimethyl propanedioate
09.559	3931		67883-79-8	Hex-3(cis)-enyl 2- methylcrotonate	cis-3-Hexenyl tiglate; cis-3-Hexenyl-2- methyl-trans-2-butenoate; (Z)-3- Hexenyl 2- methylcrotonate; Hex- 3(cis)-enyl 2-methylbut-2(trans)- enoate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.561	3925	10676	65405-76-7	Hex-3(cis)-enyl anthranilate	(Z)-Hexenyl 2-aminobenzoate; (Z)- Hex-3-enyl anthranilate; cis-3- Hexenyl anthranilate; Hex-3(cis)-enyl 2-aminobenzoate
09.562	3353		56922-80-6	trans-3-Hexenyl formate	
09.563	3929	11783	41519-23-7	Hex-3(cis)-enyl isobutyrate	beta,gamma-Hexenyl isobutanoate; (Z)-Hex-3-enyl isobutyrate; cis-3- Hexenyl isobutyrate; Hex-3(cis)-enyl 2-methylpropanoate
09.564	3933	10683	33467-74-2	Hex-3(cis)-enyl propionate	beta, gamma-Hexenyl propanoate; (E)- Hex-2-enyl propionate; trans-2- Hexenyl propionate;
09.565	3934	10684	68133-76-6	Hex-3-enyl 2-oxopropionate	Hex-3-enyl pyruvate;
09.566	3982		65405-80-3	(Z)-3-Hexenyl (E)-2-butenate	2-Butenoic acid, 3-hexenyl ester; (E,Z)-Crotonate de (Z)-3-hexenyle; (Z)-3-Hexenyl crotonate; (Z)-3- Hexenylcrotonat; (E,Z)-2-Butenoic acid 3-hexenyl ester; cis-3-Hexenyl trans-2-butenate
09.568	3928		53398-87-1	Hex-3-enyl hex-2-enoate	
09.570		10685	65405-77-8	Hex-3-enyl salicylate	Hex-3-enyl 2-hydroxybenzoate



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.571	3936	10686	35852-46-1	Hex-3-enyl valerate	Hex-3-enyl pentanoate; cis-3-Hexenyl pentanoate; cis-3-Hexenyl valerate; (Z)-Hex-3-enyl valerate;
09.573	4132	10675	1516-17-2	Hexa-2,4-dienyl acetate	
09.578	3354	10688	1617-25-0	Hexyl crotonate	Hexyl but-2(trans)-enoate
09.581		10695	6259-76-3	Hexyl salicylate	n-Hexyl o-hydroxybenzoate; Hexyl 2-hydroxybenzoate
09.583		10696	1117-59-5	Hexyl valerate	Hexyl pentanoate;
09.584	4146		85586-67-0	Isobornyl isobutyrate	Propanoic acid, 2- methyl-, (1R, 2R, 4R)- 1,7,7-trimethylbicyclo[ 2.2.1] hept- 2- yl
09.585		10710	2445-67-2	Isobutyl 2-methylbutyrate	2-Methylpropyl 2-methylbutanoate
09.587		10707	30673-38-2	Isobutyl decanoate	2-Methylpropyl decanoate
09.588		10708	37811-72-6	Isobutyl dodecanoate	2-Methylpropyl dodecanoate
09.589		10715	110-34-9	Isobutyl hexadecanoate	Isobutyl palmitate; 2-Methylpropyl hexadecanoate
09.590		10709	585-24-0	Isobutyl lactate	2-Methylpropyl 2-hydroxypropanoate
09.593		10714	5461-06-3	Isobutyl octanoate	2-Methylpropyl octanoate
09.594		10712	25263-97-2	Isobutyl tetradecanoate	Isobutyl myristate; 2-Methylpropyl tetradecanoate
09.599		10719	109-25-1	Isopentyl heptanoate	3-Methylbutyl heptanoate
09.600		10723	81974-61-0	Isopentyl hexadecanoate	Isoamyl palmitate; 3-Methylbutyl hexadecanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.601		10720	19329-89-6	Isopentyl lactate	3-Methylbutyl 2-hydroxypropanoate
09.602		10722	62488-24-8	Isopentyl tetradecanoate	Isoamyl myristate; 3-Methylbutyl tetradecanoate
09.603		10729	6284-46-4	Isopropyl crotonate	Isopropyl but-2(trans)-enoate
09.604		10730	2311-59-3	Isopropyl decanoate	Isopropyl caprate;
09.606		10732	142-91-6	Isopropyl hexadecanoate	Isopropyl palmitate;
09.608		10731	5458-59-3	Isopropyl octanoate	Isopropyl caprylate;
09.614		10738	10471-96-2	Linalyl valerate	Linalyl pentanoate; 1,5-Dimethyl-1- vinylhex-4-enyl pentanoate
09.615	3566	10748	28839-13-6	p-Menth-1-en-9-yl acetate	
09.616	3810		77341-67-4	mono-Menth-3-yl succinate	Butanedioic acid, mono[5-methyl 2-(1- methyl-ethyl)cyclohexyl] ester, [1R-(1alpha,2beta,5alpha)]; 3-(5-methyl-2-isopropylcyclohexoxycarbonyl)propan oic acid
09.618		10751	2230-90-2	Menthyl formate	p-Menthane-3-yl formate
09.626		10848	600-22-6	Methyl 2-oxopropionate	Methyl pyruvate;
09.629		10755	21188-60-3	Methyl 3-acetoxyhexanoate	
09.632		10756	35234-22-1	Methyl 5-acetoxyhexanoate	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.637		11799	2482-39-5	Methyl dec-2-enoate	
09.638		10784	7367-83-1	Methyl dec-4-enoate	
09.639	3859		4493-42-9	Methyl deca-2,4-dienoate	
09.640		10782	1191-03-3	Methyl deca-4,8-dienoate	
09.641		10792	6208-91-9	Methyl dodec-2-enoate	
09.642		10795	107-31-3	Methyl formate	
09.643		10797	1189-09-9	Methyl geranate	Methyl 3,7-dimethyl-2(trans),6- octadienoate
09.645	3411	713	112-63-0	Methyl linoleate	Methyl octadeca-9(cis),12(cis)- dienoate;
09.646	3411	714	301-00-8	Methyl linolenate	Methyl octadeca-9(cis),12(cis),15(cis)- trienoate;
09.648	4169		10072-05-6	Methyl N,N- dimethylantranilate	Benzoic acid, 2-( dimethylamino)-, methyl ester Anthranilic acid, N, N- dimethyl-, methyl ester Methyl 2-( dimethylamino) benzoate Methyl o-( dimethylamino) benzoate

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.649	4170		2719-08-6	Methyl N-acetylanthranilate	Benzoic acid, 2-( acetylamino)-, methyl ester; Anthranilic acid, N- acetyl-, methyl ester; Methyl 2-( acetylamino) benzoate; Methyl 2-acetamidobenzoate; Methyl N- acetoanthranilate; o-( Methoxycarbonyl) acetanilide; o-Acetamidobenzoic acid methyl ester
09.650	4171		41270-80-8	Methyl N-formylanthranilate	Benzoic acid, 2-( formylamino)-, methyl ester; Methyl o- formamidobenzoate; N-Formylanthranilic acid, methyl ester
09.651		10849	112-61-8	Methyl octadecanoate	Methyl stearate;
09.652		10836	112-62-9	Methyl oleate	Methyl 9-octadecenoate; Methyl octadec-9-enoate
09.657	4012	10761	626-38-0	1-Methylbutyl acetate	Pent-2-yl acetate;
09.658	3893	10763	60415-61-4	1-Methylbutyl butyrate	Pent-2-yl butyrate;
09.660		10765	55195-23-8	2-Methylbutyl decanoate	
09.662		10768	2601-13-0	2-Methylbutyl hexanoate	
09.663		10770	2445-69-4	2-Methylbutyl isobutyrate	2-Methylpropionic acid, 2- methylbutyl ester; 2-Methylbutyl 2- methylpropanoate
09.664		10776	67121-39-5	2-Methylbutyl octanoate	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.665		10778	2438-20-2	2-Methylbutyl propionate	
09.666		10774	93805-23-3	2-Methylbutyl tetradecanoate	Methylbutyl myristate;
09.669		10857	1118-39-4	Myrcenyl acetate	7-Methyl-3-methyleneoct-1-en-7-yl acetate
09.671		10862	56001-43-5	Nerolidyl acetate	1,5,9-Trimethyl--1-vinyl-4(cis),8- decadienyl acetate
09.676		10799	2051-50-5	sec-Octyl acetate	1-Methylheptyl acetate
09.677		10865	4887-30-3	Octyl hexanoate	
09.678	4191		74298-89-8	(Z)-Pent-2-enyl hexanoate	2- Penten- 1- yl hexanoate
09.679		10875	68039-26-9	Pentyl 2-methylbutyrate	Amyl 2-methylbutyrate;
09.684		10880	64181-20-0	Phenethyl crotonate	Phenylethyl but-2(trans)-enoate
09.685		10881	61810-55-7	2-Phenethyl decanoate	Phenethyl caprate;
09.688	3958	10878	122-79-2	Phenyl acetate	(Acetyloxy) benzene; Phenol acetate;
09.689	3960	11814	118-55-8	Phenyl salicylate	Acetoxybenzene;
09.691	4197		10236-16-5	(E,Z)-Phytyl acetate	Salol; Phenyl 2-hydroxybenzoate; Phenyl-o-hydroxybenzoate
09.692	4202	11796	1191-16-8	Prenyl acetate	3-Methylbut-2-enyl acetate
09.693	4203		08.11.5205	Prenyl benzoate	2- Buten- 1- ol, 3- methyl-, benzoate; 3- Methyl- 2- butenyl benzoate; Benzoic acid, 3-methyl- 2- butenyl ester

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.694	4205		68480-28-4	Prenyl formate	2- Buten- 1- ol, 3- methyl-, formate; Methanoic acid, 3- methyl- 2- butenyl ester
09.695	4206		76649-23-5	Prenyl isobutyrate	Propanoic acid, 2- methyl-, 3-methyl- 2- butenyl ester; Isobutyric acid, 3- methyl- 2- butenyl ester
09.698		10891	37064-20-3	Propyl 2-methylbutyrate	
09.701	2038	228	7493-74-5	Allyl phenoxyacetate	Acetate P.A.; 2-Propenyl phenoxyacetate;
09.702	2955	229	4606-15-9	Propyl phenylacetate	Propyl alpha-toluate; Propyl alpha- Toluate;
09.703	2812	230	122-45-2	Octyl phenylacetate	Octyl alpha-toluate;
09.704	2516	231	102-22-7	Geranyl phenylacetate	Geranyl alpha-toluate; Trans-3,7- Dimethyl-2,6- octadien-1-yl- phenylacetate; 3,7-Dimethylocta- 2(trans),6-dienyl phenyl acetate
09.705	2149	232	102-16-9	Benzyl phenylacetate	Benzyl alpha-toluate; Phenylacetic acid, benzyl ester; Benzyl-2-phenyl ethanoate;
09.706	3740	233	102-17-0	Anisyl phenylacetate	4-Methoxybenzyl phenylacetate; Anisyl alpha- toluate; p- Methoxybenzyl phenylacetate; Phenylacetic acid, p-methoxybenzyl ester;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.707	2866	234	102-20-5	Phenethyl phenylacetate	Phenylethyl phenylacetate; Phenethyl alpha-toluate; 2-Phenylethyl alpha-toluate; 2-Phenylethyl phenylacetate;
09.708	2300	235	7492-65-1	Cinnamyl phenylacetate	3-Phenyl-2-propen-1-yl phenylacetate; Cinnamyl alpha-toluate; 3-Phenylallyl phenylacetate; 3-Phenylprop-2-enyl phenyl acetate
09.709	3077	236	101-94-0	p-Tolyl phenylacetate	p-Cresyl alpha-toluate; p-Cresyl phenylacetate; p-Tolyl alpha-Toluate; 4-Methylphenyl phenylacetate
09.710	2477	237	120-24-1	Isoeugenyl phenylacetate	2-methoxy-4-phenyl phenylacetate; 4-Propenylguaiacyl phenylacetate; Isoeugenyl alpha-Toluate; 2-Methoxy- 4-(prop-1-enyl)phenyl phenylacetate
09.711	2535	238	4112-89-4	Guaiacyl phenylacetate	o-Methylcatechol acetate; Guaiacol phenylacetate; o-Methoxyphenyl phenylacetate; 2-Methoxyphenyl phenylacetate
09.712	3008	239	1323-75-7	Santalyl phenylacetate	alpha-Santalyl phenylacetate; beta- Santalyl phenylacetate; Santalyl alpha-toluate;
09.713	2679	248	121-98-2	Methyl 4-methoxybenzoate	Methyl p-methoxybenzoate; Methyl p-anisate; Methyl anisate;
09.714	2420	249	94-30-4	Ethyl 4-methoxybenzoate	Ethyl p-methoxybenzoate; Ethyl p-anisate; Ethyl anisate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.715	2682	250	134-20-3	Methyl anthranilate	Methyl o-Aminobenzoate; o-Amino methyl benzoate; Methyl 2- aminobenzoate
09.716	2421	251	87-25-2	Ethyl anthranilate	Ethyl o-Aminobenzoate; Ethyl 2- aminobenzoate
09.717	2181	252	7756-96-9	Butyl anthranilate	Butyl 2-Aminobenzoate; Butyl o- Aminobenzoate; Butyl 2- aminobenzoate
09.718	2182	253	7779-77-3	Isobutyl anthranilate	Isobutyl 2-aminobenzoate; Isobutyl o- Aminobenzoate; 2-Methylpropyl 2- aminobenzoate
09.719	2020	254	7493-63-2	Allyl anthranilate	Allyl o-aminobenzoate; 2-Propenyl 2- aminobenzoate; 2-Propenyl anthranilate; Allyl 2- aminobenzoate
09.721	2637	256	7149-26-0	Linalyl anthranilate	Linalyl o-aminobenzoate; 3,7- Dimethyl-1,6- octadien-3-yl-2- aminobenzoate; Linalyl 2- aminobenzoate; 1,5-Dimethyl-1- vinylhex-4-enyl 2-aminobenzoate
09.722	2350	257	7779-16-0	Cyclohexyl anthranilate	Cyclohexyl 2-aminobenzoate
09.723	2859	258	133-18-6	Phenethyl anthranilate	2-Phenylethyl anthranilate; Beta- Phenylethyl o- Aminobenzoate; 2- Phenylethyl 2-aminobenzoate



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.724	3048	259	14481-52-8	alpha-Terpinyl anthranilate	p-Menth-1-en-8-yl anthranilate; p- Mentha-1-en-8-yl 2-aminobenzoate; Terpinyl o-Aminobenzoate; p-Menth- 1-en-8-yl 2-aminobenzoate
09.725	2683	260	93-58-3	Methyl benzoate	Methyl benzenecarboxylate;
09.726	2422	261	93-89-0	Ethyl benzoate	Ethyl benzenecarboxylate; Ethyl benzene carboxylate;
09.727	2138	262	120-51-4	Benzyl benzoate	Benzoic acid benzyl ester; Benzyl benzenecarboxylate; Benzyl phenylformate;
09.728	2453	307	10031-93-3	Ethyl 4-phenylbutyrate	Butanoic acid, 4-methyl, ethyl ester; Ethyl 4-phenyl-butanoate;
09.729	2739	308	2046-17-5	Methyl 4-phenylbutyrate	Methyl gamma-phenylbutyrate;
09.730	2430	323	103-36-6	Ethyl cinnamate	Ethyl beta-phenylacrylate; Ethyl trans-cinnamate; Ethyl 3-phenylpropenoate; Ethyl phenylacrylate; Ethyl 3- phenylprop-2-enoate
09.731	2938	324	7778-83-8	Propyl cinnamate	n-propyl 3-phenylpropenoate; n- Propyl beta-phenylacrylate; Propyl 3- phenylprop-2-enoate
09.732	2939	325	7780-06-5	Isopropyl cinnamate	Propyl iso cinnamate; Isopropyl 3-phenylpropenoate; 1-Methylethyl 3-phenylpropenoate; Isopropyl 3- phenylprop-2-enoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.733	2192	326	538-65-8	Butyl cinnamate	Butyl 3-phenylpropenoate; Butyl beta-Phenylacrylate; n-Butyl phenylacrylate; Cinnamic acid, butyl ester; Butyl 3-phenylprop-2-enoate
09.734	2193	327	122-67-8	Isobutyl cinnamate	2-Methylpropyl beta-phenylacrylate; 2-Methylpropyl 3-phenylpropenoate; Isobutyl beta-phenylacrylate; 2- Methylpropyl 3-phenylprop-2-enoate
09.735		328	3487-99-8	Pentyl cinnamate	Amyl cinnamate; Cinnamic acid amyl ester; Pentyl-3-phenyl prop-2-enoate; Pentyl 3-phenylprop-2-enoate
09.736	2641	329	78-37-5	Linalyl cinnamate	3,7-Dimethyl-1,6-octadien-3-yl cinnamate; Linalyl 3- phenylpropenoate; 3,7-Dimethyl-1,6-octadien-3-yl beta-phenylacrylate; 1,5- Dimethyl-1-vinylhex-4-enyl 3- phenylprop-2-enoate
09.737	3051	330	10024-56-3	Terpinyl cinnamate	Terpinyl 3-phenylpropenoate; Terpinyl beta-Phenylacrylate; p-Menth- 1-en-8-yl cinnamate
09.738	2142	331	103-41-3	Benzyl cinnamate	Cinnamein; Benzyl beta- phenylacrylate; 2-Propenoic acid, 3- phenyl, phenylmethyl ester; Benzyl 3- phenylprop-2-enoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.739	2298	332	122-69-0	Cinnamyl cinnamate	Styracin; Phenylallyl cinnamate; 3- Phenyl-2-propen-1-yl 3- phenylpropenoate; 3-Phenylprop-2- enyl 3-Phenylprop-2-enoate
09.740	2698	333	103-26-4	Methyl cinnamate	Methyl 3-phenylpropenoate; Methyl-3- phenyl prop-2-enoate; Methyl 3- phenylprop-2-enoate
09.741	2022	334	1866-31-5	Allyl cinnamate	Allyl-beta-phenylacrylate; Propenyl cinnamate; Allyl-3-phenyl propenoate; Allyl $\beta$ -phenylacrylate; Allyl 3- phenylprop-2-enoate
09.742	2063	335	7779-65-9	Isopentyl cinnamate	Penty iso cinnamate; Isoamyl cinnamate; Isopentyl 3- phenylpropenoate; Isopentyl $\beta$ -phenylacrylate; 3-Methylbutyl 3- phenylprop-2-enoate
09.743	2863	336	103-53-7	Phenethyl cinnamate	Benzyl carbinyl cinnamate; Benzylcarbinyl cinnamate; 2- Phenylethyl 3-phenylpropenoate; $\beta$ - Phenethyl $\beta$ -phenylacrylate; Phenethyl 3-phenylprop-2-enoate
09.744	2352	337	7779-17-1	Cyclohexyl cinnamate	Cyclohexyl 3-phenylpropenoate; Cyclohexyl $\beta$ -phenylacrylate; Cyclohexyl-3-phenyl prop-2-enoate; Cyclohexyl 3-phenylprop-2-enoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.745	2894	338	122-68-9	3-Phenylpropyl cinnamate	Hydrocinnamyl cinnamate; Phenylpropyl cinnamate; Hydrocinnamyl 3-phenylpropenoate; 3- Phenylpropyl beta-phenylacrylate; 3- Phenylpropyl 3-phenylprop-2-enoate
09.746	2741	427	103-25-3	Methyl 3-phenylpropionate	Methyl hydrocinnamate; Methyl Dihydrocinnamate;
09.747	2455	429	2021-28-5	Ethyl 3-phenylpropionate	Ethyl hydrocinnamate; Ethyl dihydrocinnamate;
09.748	2458	432	118-61-6	Ethyl salicylate	Salicylic ether; Salicylic acid, ethyl ester; Ethyl 2-hydroxybenzoate
09.749	2745	433	119-36-8	Methyl salicylate	Methyl 2-hydroxybenzoate
09.750	2213	434	87-19-4	Isobutyl salicylate	2-Methyl-1-propyl salicylate; 2- Methylpropyl o-hydroxybenzoate; Butyl salicylate; Isobutyl o-Hydroxybenzoate; 2-Methylpropyl 2-hydroxybenzoate
09.751	2084	435	87-20-7	Isopentyl salicylate	Isopentyl o-hydroxybenzoate; Salicylic acid, isopentyl ester; Isoamyl o-hydroxybenzoate; 3-Methylbutyl salicylate; 3-Methylbutyl 2- hydroxybenzoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.752	2151	436	118-58-1	Benzyl salicylate	Benzoic acid, 2-hydroxy, phenylmethyl ester; Benzyl o- hydroxybenzoate; Salicylic acid, benzyl ester; Benzyl 2- hydroxybenzoate
09.753	2868	437	87-22-9	Phenethyl salicylate	2-Phenylethyl salicylate; Benzylcarbiny 2-hydroxybenzoate; Benzylcarbiny salicylate; 2-Phenylethyl 2-hydroxybenzoate
09.754	2203	525	94-26-8	Butyl 4-hydroxybenzoate	Butyl p-hydroxy benzoate; Butyl parasept; p-Hydroxybenzoic acid butyl ester;
09.755	2058	562	94-46-2	Isopentyl benzoate	Isoamyl benzoate; Pentyl iso benzoate; Amyl iso benzoate; Isopentyl phenyl methanoate; 3-Methylbutyl benzoate
09.756		566	94022-06-7	Isobornyl phenylacetate	exo-2-Bornyl phenylacetate; 1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl phenylacetate
09.757	2185	567	120-50-3	Isobutyl benzoate	Isobutyl phenyl methanoate; 2- Methylpropyl benzoate
09.758	2690	577	3549-23-3	Methyl p-tert-butylphenylacetate	Methyl 4-(1,1- dimethylethyl)phenylacetate
09.761		612	5137-52-0	Pentyl phenylacetate	Amyl phenylacetate;
09.762		613	2050-08-0	Pentyl salicylate	Isoamyl o-hydroxybenzoate; Isoamyl salicylate; Pentyl 2-hydroxybenzoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.763	3650	614	2052-14-4	Butyl salicylate	Butyl (2-hydroxy-phenyl)-methanoate; Butyl 2-hydroxybenzoate
09.764	4115	629	38446-21-8	Ethyl N-ethylanthranilate	Ethyl N-ethyl-2-aminobenzoate
09.765	4116	632	35472-56-1	Ethyl N-methylanthranilate	Ethyl N-methyl-2-aminobenzoate
09.766	2471	636	531-26-0	Eugenyl benzoate	Benzoyl eugenol; Eugenol benzoate; 4- Allyl-2-methoxyphenyl benzoate
09.767	2511	639	94-48-4	Geranyl benzoate	Geraniol benzoate; trans-3,7-Dimethyl- 2,6-octadien-1-yl-benzoate; 3,7- Dimethylocta-2(trans),6-dienyl benzoate
09.768	3691	645	6789-88-4	Hexyl benzoate	n-Hexyl benzoate; Hexyl phenyl methanoate;
09.769	4149	649	65505-24-0	Isobutyl N-methylanthranilate	2-Methylpropyl N-methyl-2- aminobenzoate
09.770	2932	652	939-48-0	Isopropyl benzoate	Propyl iso benzoate; 1-Methylethyl benzoate;
09.771	2638	654	126-64-7	Linalyl benzoate	Linalool benzoate; 3,7-Dimethyl-1,6- octadien-3-yl benzoate; 1,5-Dimethyl- 1-vinylhex-4-enyl benzoate
09.772	3501	655	7143-69-3	Linalyl phenylacetate	Linalyl alpha-toluate; 3,7-Dimethyl- 1,6-octadien-3-yl phenylacetate; Linalyl alpha-Toluate; 1,5-Dimethyl-1- vinylhex-4-enyl phenylacetate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.774	2860	667	94-47-3	Phenethyl benzoate	2-Phenylethyl benzoate; Benzylcarbonyl benzoate;
09.776	2931	677	2315-68-6	Propyl benzoate	Propyl phenyl methanoate;
09.779		740	136-60-7	Butyl benzoate	n-Butyl benzoate;
09.780		743	5320-75-2	Cinnamyl benzoate	3-Phenylallyl benzoate; 3-Phenylprop- 2-enyl benzoate
09.781	2718	756	85-91-6	Methyl N-methylantranilate	Dimethyl anthranilate; 2-Methylamino methyl benzoate; Methyl 2- Methylamonobenzoate; Methyl o- Methylaminobenzoate; Methyl N-methyl-2-aminobenzoate
09.782	2551	2104	10032-08-3	Heptyl cinnamate	Heptyl- $\beta$ -phenylacrylate; Heptyl-3- phenyl propenoate; Heptyl 3- phenylprop-2-enoate
09.783	2733	2155	101-41-7	Methyl phenylacetate	Methyl alpha-toluate; Methyl Alpha- Toluate;
09.784	2452	2156	101-97-3	Ethyl phenylacetate	Ethyl alpha-toluate; Alpha-Toluic acid, ethyl ester; Ethyl Alpha-Toluate;
09.785	2315	2157	139-70-8	Citronellyl phenylacetate	3,7-Dimethyl-6-octen-1-yl phenylacetate; Citronellyl alpha- Toluate; 3,7-Dimethyloct-6-enyl phenylacetate
09.786	2956	2158	4861-85-2	Isopropyl phenylacetate	Isopropyl Alpha-Toluate;
09.787	2209	2159	122-43-0	Butyl phenylacetate	Butyl Alpha-Toluate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.788	2210	2160	102-13-6	Isobutyl phenylacetate	Isobutyl alpha-toluate; 2-Methylpropyl phenylacetate
09.789	2081	2161	102-19-2	3-Methylbutyl phenylacetate	Isoamyl phenylacetate; Isopentyl phenylacetate; Isoamyl Alpha-Toluate;
09.790	2039	2162	1797-74-6	Allyl phenylacetate	Allyl alpha-toluate; 2-Propenyl phenylacetate;
09.791	2985	2163	10486-14-3	Rhodinyl phenylacetate	alpha-Citronellyl phenylacetate; 3,7- Dimethyl-7-octen-1-yl phenylacetate; Rhodinyl alpha-toluate; 3,7- Dimethyloct-7-enyl 2-phenylacetate
09.796	2717	2192	606-45-1	Methyl 2-methoxybenzoate	o-Methoxybenzoic acid methyl ester; Dimethyl salicylate; Methyl o-anisate; Methyl salicylate o-methyl ether;
09.797	3157	2243	67028-40-4	Ethyl (p-tolyloxy)acetate	Ethyl cresoxyacetate; Vinigar naphtha; Ethyl (4-methylphenoxy)acetate
09.798		2302	617-05-0	Ethyl vanillate	Ethyl 4-hydroxy-3-methoxybenzoate
09.799		2305	3943-74-6	Methyl vanillate	Methyl 4-hydroxy-3-methoxybenzoate
09.801	2767	11862	63449-68-3	2-Naphthyl anthranilate	2-Naphthyl o-Aminobenzoate; Naphth- 2-yl 2-aminobenzoate



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.802	3341	10587	2983-36-0	Ethyl 2-ethyl-3- phenylpropionate	Ethyl alpha-ethylhydrocinnamate; Ethyl benzylbutyrate; Ethyl 2- ethylhydrocinnamate;
09.803	3419	10890	19224-26-1	Propylene glycol dibenzoate	1,2-Propanediol dibenzoate; Propan-1,2-diyl dibenzoate
09.804	3457	10694	5421-17-0	Hexyl phenylacetate	Hexyl Alpha-Toluate; Phenylacetic acid, hexyl ester;
09.805	3633	10682	42436-07-7	Hex-3(cis)-enyl phenylacetate	beta,gamma-Hexenyl alpha-toluate; 3- Hexenyl alpha-toluate; beta, gamma- Hexenyl alpha-toluate; cis-Hexenyl phenylacetate;
09.806	3688	11778	25152-85-6	Hex-3-enyl benzoate	3-Hexen-1-ol, benzoate;
09.807	3734		617-01-6	o-Tolyl salicylate	2-Methylphenyl 2-hydroxybenzoate; o- Cresyl salicylate; 2-Hydroxy-2- methylphenylbenzoate
09.808		10659	134-28-1	Guaiyl acetate	Guaiol acetate; Guaiacwood acetate; Guaiac acetate; 6,10-Dimethyl-3-(1- methyl ethyl acetate)-bicyclo[5.3.0] dec-1(7)-ene
09.809	3848	10743	15111-97-4	p-Mentha-1,8(10)-dien-9-yl acetate	Limonen-9-yl acetate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
09.811	3754		20665-85-4	Vanillin isobutyrate	4-Isobutyryl-m-anisaldehyde; 3- Methoxy-4-isobutyrylbenzaldehyde; 4- formyl-2-methoxyphenyl 2- methylpropionate; 4-Formyl-2-methoxyphenyl 2-methylpropanoate
09.812	3398	10656	614-33-5	Glyceryl tribenzoate	Propanetri-1,2,3-yl tribenzoate
09.814		10893	2239-78-3	Propyl hexadecanoate	Propyl palmitate;
09.816		10892	624-13-5	Propyl octanoate	Propyl caprylate;
09.818	4213		29548-30-9	(E,Z)-3,7,11-Trimethyldodeca- 2,6,10-trienyl acetate	Farnesol acetate
09.820		10906	1731-81-3	Undecyl acetate	
09.821	4218	11887	117-98-6	Vetiveryl acetate	Vetiver acetate; Vetivert acetate; 2,6- Dimethyl-9-(1-methylethylidene)- bicyclo[5.3.0] dec-2-en-4-yl acetate
09.825		2307	2049-96-9	Pentyl benzoate	Amyl benzoate; Isoamyl benzoate; 3- Methyl-1-butyl benzoate;
09.829	2348	218	5452-75-5	Ethyl cyclohexyl acetate	
09.830	3047	205	8007-35-0	Terpineol acetate	
09.832		10566	21188-61-4	Ethyl 3-acetohexanoate	
09.840	3648	10889	84788-08-9	Propyl-2,4-decadienoate	
09.842	3805		156679-39-9	Menthol ethylene glycol carbonate	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.843	3806		30304-82-6	Menthol 1-and 2-propylene glycol carbonate	
09.846	3353	2153	2315-09-5	3-Hexenyl formate	
09.850	3675	631	27829-72-7	Ethyl trans-2-hexenoate	
09.854	3497	2345	53398-85-9	cis-3-Hexenyl 2- methylbutanoate	
09.857	2783		63270-14-4	Nonanediol diacetate	Nonane-1,3-diyl diacetate
09.858	3330	2184	67674-41-3	Phenylmethyl 2-methyl-2- butenoate	Benzyl tyglate
09.866	4074		6321-45-5	Allyl valerate	Pentanoic acid, 2- propenyl ester; Valeric acid, allyl ester
09.878	4118		61114-24-7	Eugenyl isovalerate	4- Allyl- 2- methoxyphenyl isovalerate; Butanoic acid, 3- methyl-, 2- methoxy- 4-( 2-propenyl) phenyl ester
09.888	4147		94200-10-9	Isobornyl 2-methylbutyrate	Butanoic acid, 2- methyl-, 1,7,7-trimethylbicyclo-[2.2.1] hept- 2- yl ester
09.916		10603	7367-90-0	Ethyl 3-hydroxyoctanoate	
09.917	4011		1576-85-8	4-Pentenyl acetate	
09.918	3967		67452-27-1	cis-4-Decenyl acetate	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
09.920	3992		156324-82-2	2-Isopropyl-5-methylcyclohexyl oxycarbonyloxy-2-hydroxypropane	DL-Menthol (+/-)-propylene glycol carbonat
09.921	3976		54653-25-7	Ethyl 5-hexenoate	
09.922	3975		39924-27-1	Ethyl cis-4-heptenoate	
09.923	3981		39026-94-3	Hept-2-yl butyrate	
09.924	3980		5921-83-5	(+/-)-3-Heptyl acetate	
09.925	4007		60826-15-5	Nonan-3-yl acetate	
09.926	4009		84434-65-1	Octan-3-yl formate	
09.927	2982		141-15-1	Rhodinyl butyrate	
09.929	4006		220621-22-7	L-Monomethylglutarate	
10.001	2781	178	104-61-0	Nonano-1,4-lactone	gamma-Nonalactone; 4- Hydroxynonanoic acid gamma- lactone; Aldehyde C-18 (so-called); Prunolide; gamma-Amyl butyrolactone; Nonanolide-1,4;
10.002	3091	179	104-67-6	Undecano-1,4-lactone	gamma-Undecalactone; Aldehyde C- 14 (so-called); gamma-Undecyl lactone; gamma-Heptyl butyrolactone; 1,4-Hendecanolide;
10.003	2555	180	7779-50-2	Hexadec-6-eno-1,16-lactone	Ambrettolide; omega-6- hexadecenlactone; 16-Hydroxy-7- hexadecenoic acid lactone; Cyclohexadecen-7-olide; 6- Hexadecenolide;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
10.004	2840	181	106-02-5	Pentadecano-1,15-lactone	Exaltolide; omega-pentadecalactone; Angelica lactone; Muscolactone; 15- Hydroxytetradecanoic acid lactone; 1,15-epoxypentadecan-1-one; Cyclopentadecanolide; 15- Pentadecanolide;
10.005	2952	494	17369-59-4	3-Propylidene-phthalide	
10.006	3291	615	96-48-0	Butyro-1,4-lactone	4-Hydroxybutanoic acid lactone; gamma-butyrolactone; 1,4-Epoxy butan-1-one; 2-Oxo oxolen; Dihydro- 2-(3H) furanone; 3 (or 4)-hydroxybutyric acid, lactone; 1,2- butanolide;
10.007	2361	621	705-86-2	Decano-1,5-lactone	delta-Decalactone; Decanolide-1,5; Amyl-delta-valerolactone; delta-n- Amyl-delta-valerolactone;
10.008	2401	624	713-95-1	Dodecano-1,5-lactone	delta-Dodecalactone; n-Heptyl-delta-valerolactone; 5-Hydroxydodecanoic acid delta-lactone; delta-Heptyl-delta- valerolactone; Dodecanolide-1,5;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
10.009	3780	625	18679-18-0	Dodec-6-eno-1,4-lactone	gamma-Dodecen-6-lactone; 4- Hydroxy-6-dodecenoic acid lactone; Dihydro-5(2-octenyl)-2(3H)-furanone; cis-6-Dodecen-4-olide;
10.010	3167	641	823-22-3	Hexano-1,5-lactone	delta-hexalactone; 5-Hydroxyhexanoic acid lactone; delta-Caprolactone; 5- Methyl-d-valerolactone; 5-Methyl-5- Hydroxypentanoic acid lactone;
10.011	3294	688	710-04-3	Undecano-1,5-lactone	5-Hydroxyundecanoic acid lactone; Undecanolide-1,5; alpha-n-hexyl-delta-valerolactone; 5-n-Hexyl-5- hydroxypentanoic acid lactone;
10.012	3293	731	591-12-8	5-Methylfuran-2(3H)-one	4-Hydroxy-3-pentenoic acid lactone; Pent-3-en-1,4-lactone; beta-gamma- Angelica lactone; 5-Methyl-2- (3H)furanone; gamma-Methyl-beta-butenolide;
10.013	3103	757	108-29-2	Pentano-1,4-lactone	gamma-Valerolactone; 4- Hydroxypentanoic acid lactone; gamma-Methyl-gamma-butyrolactone; gamma-Pentalactone; 4- Valerolactone; 4-Pentanolide;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
10.014	3356	2194	3301-94-8	Nonano-1,5-lactone	delta-Nonalactone; 5- Hydroxynonanoic acid lactone; Nonanolide-1,5; n-Butyl-delta-valerolactone;
10.015	3214	2195	698-76-0	Octano-1,5-lactone	5-Hydroxyoctanoic acid lactone; delta-Octalactone; Tetrahydro-6-propyl-5- hydroxy-2H-pyran-2-one;
10.016	3590	2196	2721-22-4	Tetradecano-1,5-lactone	delta-Tetradecalactone; 5- Hydroxytetradecanoic acid lactone; 2H-Pyran-2-one, Tetrahydro-6-nonyl-;
10.017	2360	2230	706-14-9	Decano-1,4-lactone	gamma-Decalactone; gamma-n- Decalactone; Decanolide-1,4; gamma- n-Hexyl-gamma-butyrolactone;
10.018	2372	2231	7774-47-2	4-Butyloctano-1,4-lactone	4,4-Dibutyl-4-hydroxybutyric acid, gamma-lactone; 4-Butyl-4- hydroxyoctanoic acid lactone;
10.019	2400	2240	2305-05-7	Dodecano-1,4-lactone	gamma-Dodecalactone; Dodecanolide- 1,4; gamma-n-octyl-gamma-n- butyrolactone; Dodecanolide-1;
10.020	2539	2253	105-21-5	Heptano-1,4-lactone	Heptanolide-1,4; gamma- Heptalactone; Heptanolide-(4,1); 4- Hydroxyheptanoic acid, gamma- lactone;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
10.021	2556	2254	695-06-7	Hexano-1,4-lactone	gamma-Hexalactone; Hexanolide-1,4; gamma-Ethyl-n-butyrolactone; Tonkalide; gamma-Caprolactone; Ethyl butyrolactone;
10.022	2796	2274	104-50-7	Octano-1,4-lactone	gamma-Octalactone; Octanolide-1,4; gamma-n-Butyl-gamma-butyrolactone;
10.023	3153	2300	698-10-2	5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one	Emoxyfurone; 2,4-Dihydroxy-3- methyl-2-hexenoic acid, gamma lactone; 2-Ethyl-3-methyl-4- hydroxydihydro-2,5-furan-5-one;
10.024	3333	10083	551-08-6	3-Butylidene-phthalide	
10.025	3334	10084	6066-49-5	3-Butylphthalide	
10.026	3350	10953	40923-64-6	3-Heptyldihydro-5-methyl-2(3H)-furanone	alpha-Heptyl-gamma-valerolactone; alpha-n-Heptyl-8-valerolactone;
10.027	3355	11833	499-54-7	3,7-Dimethyloctano-1,6-lactone	Menthane lactone; 6-Hydroxy-3,7- dimethyl caprylic acid, lactone; 4- Methyl-7-isopropyl-2-oxoheptanone; Menthone lactone;
10.028	3610		16429-21-3	Dodecano-1,6-lactone	epsilon-Dodecalactone; 7-Hexyl-2- oxoheptanone;
10.029	3613		5579-78-2	Decano-1,6-lactone	epsilon-Decalactone; 7-Butyl-2- oxoheptanone; 6-Butylhexanolide;
10.030	3634	11834	28664-35-9	3-Hydroxy-4,5-dimethylfuran-2(5H)-one	2-Hydroxy-3-methylpent-2-en-1,4- lactone; 2,3-Dimethyl-4-hydroxy-2,5- dihydrofuran-5-on;



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
10.031	3696	10967	27593-23-3	6-Pentyl-2H-pyran-2-one	6-Pentyl-alpha-pyrone; 2H-Pyran-2-one, 6-pentyl-;
10.033	3745		34686-71-0	Dec-7-eno-1,5-lactone	2H-Pyran-2-one, tetrahydro-6-(2-pentenyl)-, (Z); 7-Decen-5-olide;
10.034	3755		80417-97-6	5,6-Dihydro-3,6-dimethylbenzofuran-2(4H)-one	Dehydromenthofuro lactone; 2(4H)-Benzofuranone, 5,6-dihydro-3,6-dimethyl-, (R)-;
10.035	3758		68959-28-4	Undec-8-eno-1,5-lactone	5-Hydroxyundec-8-enoic acid delta lactone; 6-(3-Hexenyl)tetrahydro(2H)pyran-2-one; 2H-Pyran-2-one, 6-(3-hexenyl)tetrahydro-, (Z)-;
10.036	3764		13341-72-5	5,6,7,7a-Tetrahydro-3,6-dimethylbenzofuran-2(4H)-one	2(4H)-Benzofuranone, 5,6,7,7a-tetrahydro-3,6-dimethyl-; Dehydroxymenthofuro lactone; Mint lactone
10.037	3744		54814-64-1	Dec-2-eno-1,5-lactone	Massoia lactone;
10.042	4050	11873	774-64-1	3,4-Dimethyl-5-pentylidene furan-2(5H)-one	Bovolide; 4-Hydroxy-2,3-dimethylnona-2,4-dienoic acid lactone;
10.044	3802		16400-72-9	Dodec-2-eno-1,5-lactone	5-Hydroxy-2-dodecenoic acid lactone; Delta-2-dodecenolactone; 6-Heptyl-5,6-dihydro-2-pyrone; 5-Heptyl-2-pentene-5-olide;
10.045		10660	3301-90-4	Heptano-1,5-lactone	6-Ethyltetrahydro-2H-pyran-2-one;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
10.048		10673	730-46-1	Hexadecano-1,4-lactone	
10.049		10674	7370-44-7	Hexadecano-1,5-lactone	tetrahydro-6-undecyl-2H-pyran-2-one;
10.050	4032		92015-65-1	Dihydromintlactone	2(3H)-Benzofuranone, hexahydro-3,6- dimethyl; 3,6- Dimethylcyclohexylacetolactone; 2-(2- Hydroxy- 4- methylcyclohexyl)propionic acid gamma lactone
10.051	3786		7011-83-8	5-Hexyl-5-methyldihydrofuran- 2(3H)-one	Methyl gamma-decalactone; Dihydrojasmane lactone; 5- hexyldihydro-5-methylfuran-2(3H)- one;
10.053	3803	10535	39212-23-2	3-Methyloctano-1,4-lactone	beta-Methyl-gamma-octalactone; 4- Butyl-3- methyl-1,4-butyrolactone; 5- butyldihydro-4- methylfuran-2(3H)- one;
10.054	4188		21963-26-8	2-Nonenoic acid gamma-lactone	5- Pentyl- 5H- furan- 2- one; 2( 5H)- Furanone, 5- pentyl-; 2- Nonenoic acid, 4- hydroxy-, gamma- lactone
10.055		10907	542-28-9	Pentano-1,5-lactone	1,5-Valerolactone; delta- Valerolactone;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
10.056	4195		87-41-2	Phthalide	2- Hydroxymethylbenzoic acid gamma lactone; alpha- Hydroxy- o- toluic acid lactone; 1(3H)- Isobenzofuranone
10.057	4140		182699-77-0	2-( 2- Hydroxy- 4- methyl-3- cyclohexenyl) propionic acid gamma- lactone	Wine lactone; 2( 3H)- Benzofuranone, 3a, 4,5,7a- tetrahydro- 3,6- dimethyl; 3a, 4,5,7a- tetrahydro- 3,6- dimethylbenzofuran-2(3H)- one
10.058		10902	7370-92-5	Tridecano-1,5-lactone	tetrahydro-6-octyl-2H-pyran-2-one;
10.061	3937		70851-61-5	cis-5-Hexenyldihydro-5- methylfuran-2(3H)-one	4-Hydroxy-4-methyldec-9-enoic acid lactone; (Z)-5-Hex-3-enyldihydro-5- methylfuran-2(3H)- one;
10.063	4145		28645-51-4	Hexadec-9-en-1,16 lactone, Isoambrettolide	Oxacyclo heptadec-10-en-2-one, 9- Hexadecenoic acid, 16-hydroxy-, omicron- lactone delta-9-Isoambrettolic acid, lactone
10.069	3999		67663-01-8	3-Methyl gamma-decalactone	
11.001	3219	512	107-85-7	3-Methylbutylamine	Isoamylamine; isoPentylamine; 1- Butanamine, 3-methyl-;
11.002	4239	513	78-81-9	Isobutylamine	2-Methylpropylamine
11.003	3130	524	109-73-9	Butylamine	1-Aminobutane;
11.004	4237	601	107-10-8	Propylamine	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
11.005	4240	707	13952-84-6	sec-Butylamine	But-2-ylamine; 1-Methylpropylamine
11.006	3220	708	64-04-0	Phenethylamine	1-Amino-2-phenylethane; 2- Aminoethylbenzene; 2- Phenylethylamine;
11.007	4215	709	51-67-2	2-(4-Hydroxyphenyl)ethylamine	Tyramine; 4-(2-aminoethyl)phenol; 4- Hydroxy-phenylethylamine; Tyrosamine;
11.008	3906	2041	551-93-9	2-Aminoacetophenone	1-Acetyl-2-aminobenzene; o- Acetylaniline; 2- Acetylphenylamine; o- Aminoacetophenone; 2- Aminophenyl methyl ketone;
11.009	3241	10497	75-50-3	Trimethylamine	N,N-Dimethylmethylamine;
11.014	4248		19342-01-9	N,N-Dimethylphenethyl- amine	(R)-N,N-Dimethyl-.alpha.- phenylethylamine, (R)-N,N-[alpha]- Trimethylbenzylamine,
11.015	4236	10477	75-04-7	Ethylamine	
11.016	4243	10478	111-26-2	Hexylamine	
11.018	4238	10480	75-31-0	Isopropylamine	2-Aminopropane;
11.020	4241	10484	96-15-1	2-Methylbutylamine	
11.021	4242	11734	110-58-7	Pentylamine	Amylamine;
11.023	4246	10496	121-44-8	Triethylamine	N,N-diethylethylamine;
11.025	4245	10494	1184-78-7	Trimethylamine oxide	trimethylamine N-oxide dihydrate;
11.026	4247	10495	102-69-2	Tripropylamine	

<b>Ru No.1</b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
12.001	2747	125	3268-49-3	3-(Methylthio)propionaldehyde	Methional; 3-( Methylthio)propanal; Methylmercaptopropionaldehyde; beta-Methiopropionaldehyde;
12.002	2720	428	13532-18-8	Methyl 3-(methylthio)propionate	Methyl beta-Methylmercapto propionate; Methyl beta- Methiopropionate;
12.003	2716	475	74-93-1	Methanethiol	Methylmercaptan; Thiomethyl alcohol; Methyl sulfhydrate; Mercaptomethane;
12.004	2035	476	870-23-5	Allylthiol	2-Propene-1-thiol; 2-Propene-1-thiol; Allyl sulfhydrate;
12.005	2147	477	100-53-8	Phenylmethanethiol	Benzylmercaptan; alpha- Mercaptotoluene; alpha-Toluenethiol; Benzyl hydrosulfide; Benzylthiol; Thiobenzyl alcohol;
12.006	2746	483	75-18-3	Dimethyl sulfide	Methylsulfide; 2-Thiapropane;
12.007	2215	484	544-40-1	Dibutyl sulfide	Butylsulfide; Di-n-butyl sulphide; Butylthiobutane;
12.008	2028	485	2179-57-9	Diallyl disulfide	Allyl disulfide; 2-Propenyl disulphide;
12.009	3265	486	2050-87-5	Diallyl trisulfide	Allyl trisulfide; Prop-2-enyl-trithio prop-2-ene; Allyl trisulphide;
12.010	3478	526	109-79-5	Butane-1-thiol	n-Butyl mercaptan;
12.012	4093	533	110-81-6	Diethyl disulfide	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.013	3275	539	3658-80-8	Dimethyl trisulfide	Methyl trisulfide; Methyl trithio methane; Methyl trisulphide;
12.014	3228	540	629-19-6	Dipropyl disulfide	Propyl disulfide; Propyldithiopropene;
12.015		541	111-47-7	Dipropyl sulfide	
12.016		542	625-80-9	Di-isopropyl sulfide	
12.017		546	75-08-1	Ethanethiol	Ethyl mercaptan;
12.018	3282	11665	625-60-5	S-Ethyl acetothioate	Ethyl thioacetate; Acetic acid thio ethyl; Ethanethioic acid, S-ethyl ester; Acetic acid, thioethyl ester;
12.019	3201	585	2179-60-4	Methyl propyl disulfide	Propyl methyl disulfide; Methyl dithio propane; Methyl dithiopropene;
12.020	3308	586	17619-36-2	Methyl propyl trisulfide	Propyl methyl trisulfide; Methyl trithio propane; Propyl methyl trisulphide;
12.021	4073	600	2179-59-1	Allyl propyl disulfide	
12.022	3477	725	4532-64-3	Butane-2,3-dithiol	2,3-Dimercaptobutane;
12.023	3276	726	6028-61-1	Dipropyl trisulfide	Propyl trisulfide; Propyl trithio propane; Propyl trisulphide;
12.024	3502	760	37887-04-0	3-Mercaptobutan-2-ol	2-Hydroxy-3-butanethiol; 3-Hydroxy- 2-butanethiol; 3-Mercapto-2-butanol;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
12.025	2034	2110	57-06-7	Allyl isothiocyanate	3-Isothiocyanatopropene; 2-Propenyl isothiocyanate; AITC; Isothiocyanic acid, allyl ester; 2-Propenyl isothiocyanate; Allyl isosulfocyanate; Allyl thiocarbonimide;
12.026	3536	2175	624-92-0	Dimethyl disulfide	Methyl disulfide; Methyl disulphide;
12.027	3240	2272	137-06-4	2-Methylbenzene-1-thiol	o-Toluenethiol; 2-Methylthiophenol; o-Tolylmercaptan;
12.028	3448	2320	2550-40-5	Dicyclohexyl disulfide	Cyclohexyl disulphide;
12.029	3262	2321	1679-07-8	Cyclopentanethiol	Cyclopentyl mercaptan;
12.030	3312	2326	505-79-3	3-(Methylthio)propyl isothiocyanate	3-Methylmercaptopropyl isothiocyanate; Isothiocyanic acid, 3- (methylthio)propyl ester;
12.031	3300	2327	67633-97-0	3-Mercaptopentan-2-one	
12.032	3310	2328	2432-51-1	S-Methyl butanethioate	Methyl thiobutyrate; Methanethiol n- Butyrate; Thiobutyric acid, methyl ester;
12.033	3314	2330	91-60-1	Naphthalene-2-thiol	beta-Thionaphthol; 2- Mercaptanaphthalene; 2-Naphthyl mercaptan; 2-Thionaphthol;
12.034	3514	2331	1191-62-4	Octane-1,8-dithiol	1,8-Dimercaptooctane; Octamethylene dimercaptan;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.035	3503	2332	23832-18-0	2-,3- and 10-Mercaptopinane	Pinanethiol; Pinanyl mercaptan; 2,6,6 Trimethyl-bicyclo[3.1.1]heptane-(2,3 and 10)-thiol
12.036	3509	2353	54957-02-7	3-[(2-Mercapto-1-methylpropyl)thio]butan-2-ol	alpha-Methyl-beta-hydroxypropyl alpha-methyl-beta-mercaptopropyl sulfide; 2-Butanol, 3-[(2-mercapto-1- methylpropyl)thiol-;
12.037	3127	11866	2179-58-0	Allyl methyl disulfide	Methyl allyl disulphide;
12.038	3177	11789	38462-22-5	8-Mercapto-p-menthan-3-one	8-Mercaptomenthone; Thiomenthone;
12.039	3180	11790	79-42-5	2-Mercaptopropionic acid	Thiolactic acid; alpha- Mercaptopropionic acid; 2- Thiolpropionic acid;
12.040	3206	11686	23328-62-3	2-Methylthioacetaldehyde	Methyl mercapto aldehyde; Methylmercapto acetaldehyde;
12.041	3207	11543	13678-58-5	1-(Methylthio)butan-2-one	
12.042	3210	11553	1073-29-6	2-(Methylthio)phenol	1-Hydroxy-2-methylmercaptobenzene; 2-Methylmercaptophenol;
12.043	3225	11757	882-33-7	Diphenyl disulfide	Phenyl disulfide; Biphenyl disulfide; Phenylthiobenzene;
12.044	3227	11699	5905-46-4	Prop-1-enyl propyl disulfide	Propyl propenyl disulfide;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
12.045	3253	11867	34135-85-8	Methyl allyl trisulfide	Methyl allyl trisulphide;
12.046	3279	11469	19788-49-9	Ethyl 2-mercaptopropionate	Ethyl thiolactate; 2-Mercapto propionic acid, ethyl ester;
12.047	3298	11497	40789-98-8	3-Mercaptobutan-2-one	
12.048	3303	11509	1878-18-8	2-Methylbutane-1-thiol	Amyl mercaptan; 2-Methylbutyl mercaptan; Thioamyl alcohol;
12.049	3304	11510	2084-18-6	3-Methylbutane-2-thiol	sec-Isoamylmercaptan;
12.052	3335	11441	40790-04-3	Di-(3-oxobutyl) sulfide	bis(Butan-3-one-1-yl) sulfide;
12.053	3343	11476	13327-56-5	Ethyl 3-(methylthio)propionate	Ethyl-beta-methylthiopropionate;
12.054	3345	11666	4500-58-7	2-(Ethylthio)phenol	2-Ethylphenyl mercaptan; 2- Ethylbenzenethiol;
12.055	3357	11498	34619-12-0	4-Mercaptobutan-2-one	2-Keto-4-butanethiol;
12.056	3374	11687	16630-52-7	3-(Methylthio)butanal	3-Methyl thio butyraldehyde; 3- Methyl propanethiol; Thio isoamyl aldehyde; Thio isovaleraldehyde;
12.057	3375	11688	34047-39-7	4-(Methylthio)butan-2-one	(4-Methyl)-thio-2-butanone; Methyl propyl thioketone; 4-Methyl-2-butane- thione; 2-Pentane thione;
12.058	3376	11551	23550-40-5	4-(Methylthio)-4-methylpentan-2-one	
12.059	3385	11576	2307-10-0	Propyl thioacetate	Ethanethioic acid, S-propyl ester; Acetic acid, thiopropyl ester;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.060	3412	11526	53053-51-3	Methyl 4-(methylthio)butyrate	Methyl gamma-methyl mercapto butyrate;
12.061	3414	11542	42919-64-2	4-(Methylthio)butanal	4-(Methylmercapto)butanal;
12.062	3415	11554	505-10-2	3-(Methylthio)propan-1-ol	Methionol; gamma-Hydroxypropyl methyl sulfide; 3-Methylthio propyl alcohol; Methyl 3-hydroxypropyl sulfide;
12.063	3438	11548	51755-66-9	3-(Methylthio)hexan-1-ol	3 -Methylmercapto-1-hexanol;
12.064	3472	11583	39067-80-6	Thiogeraniol	3,7-Dimethyl-2,6-octadien-1-thiol; 3,7- Dimethyl-2(trans),6-octadiene-1-thiol
12.065	3483	11904	59902-01-1	2,8-Dithianon-4-en-4-carboxaldehyde	5-(Methylthio)-2-(methyl- thio)methylpent-2-en-1-al; 5- Methylthio-2-[(methylthio)methyl]pent-2-enal
12.066	3484	11467	540-63-6	Ethane-1,2-dithiol	Dithioglycol; 1,2-Dimercaptoethane; Ethylene dithioglycol; Ethylene mercaptan;
12.067	3495	11486	1191-43-1	Hexane-1,6-dithiol	1,6-Dimercaptohexane; Hexamethylene dimercaptan;
12.068	3504	11508	699-10-5	Benzyl methyl disulfide	Benzyl dithiomethane; Methyl phenylmethyl disulfide;
12.069	3513	11558	3489-28-9	Nonane-1,9-dithiol	1,9-Dimercaptononane; Nonamethylene dimercaptan;
12.070	3520	11564	814-67-5	Propane-1,2-dithiol	1,2-Dimercaptopropane;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
12.071	3521	11816	107-03-9	1-Propane-1-thiol	Propyl mercaptan; n-Thiopropyl alcohol; Propylthiol;
12.072	3528	11909	16128-68-0	Butane-1,2-dithiol	1,2-Dimercaptobutane;
12.073	3529	11910	24330-52-7	Butane-1,3-dithiol	1,3-Dimercaptobutane;
12.074	3533	11912	72869-75-1	Diallyl polysulfides	2-Propenyl polysulfides; Diallyl di-, tri-, tetra-, and pentasulfides;
12.075	3576	11712	5905-47-5	Methyl prop-1-enyl disulfide	1-Propenyl methyl disulphide; Methylthio-1-propene;
12.076	3588	11929	109-80-8	Propane-1,3-dithiol	1,3-Dimercaptopropane; Trimethylene dimercaptan;
12.077	3597		766-92-7	Benzyl methyl sulfide	Sulfide, benzyl methyl; Methylthiomethyl benzene;
12.078	3600		20582-85-8	4-(Methylthio)butan-1-ol	
12.079	3601	11549	40878-72-6	2-(Methylthiomethyl)but-2-enal	2-Ethylidene methional;
12.080	3616	11585	108-98-5	Thiophenol	Benzenethiol; Phenyl mercaptan;
12.081	3617		150-60-7	Dibenzyl disulfide	1,4-Diphenyl-2,3-dithiobutane; alpha-Benzylthio toluene;
12.082	3666		118-72-9	2,6-(Dimethyl)thiophenol	2,6-Dimethylbenzenethiol; 2,6- Xylenethiol;
12.083	3677		5466-06-8	Ethyl 3-mercaptopropionate	Ethyl 3-thiopropionate;
12.084	3681		22014-48-8	Ethyl 4-(methylthio)butyrate	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.085	3700		71159-90-5	p-Menth-1-ene-8-thiol	alpha,alpha,4-Trimethyl-3-cyclohexene-1-methanethiol;
12.086	3708		51534-66-8	Methyl 2-(methylthio)butyrate	Methylthio 2-methylbutyrate; Butanethioic acid, 2-methyl, S-methyl ester;
12.087	3717		65887-08-3	2-(Methylthiomethyl)-3-phenylpropenal	alpha-Benzylidenemethional; 2- Propenal, 2-(methylthiomethyl)-3- phenyl-;
12.088	2042	11846	592-88-1	Diallyl sulfide	Allyl sulfide; 2-Propenyl sulphide; Thioallyl ether;
12.089	3836	11475	233665-96-8	Ethyl 3-(methylthio)butyrate	
12.092	3533	11912	72869-75-1	Diallyl pentasulfide	
12.093	3533	11912	72869-75-1	Diallyl hexasulfide	
12.094	3533	11912	72869-75-1	Diallyl heptasulfide	
12.096		11429	10152-76-8	Allyl methyl sulfide	
12.098		11433	33368-82-0	Allyl prop-1-enyl disulfide	
12.099		11434	33922-70-2	Allyl propyl sulfide	(2- Propenyl)thiopropene;
12.100		11435	33922-73-5	Allyl propyl trisulfide	
12.101	3329	11436	41820-22-8	Allyl thiopropionate	
12.102		11863	622-78-6	Benzyl isothiocyanate	2- Isothiocyanatotoluene;
12.107	4082	11488	592-82-5	Butyl isothiocyanate	4-Isothiocyanato-but-1-ene;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.108	4096	11454	68084-03-7	Di-isopentyl thiomalate	bis(3-methylbutyl) mercaptosuccinate; Di(3-methylbutyl) but-2(cis)- enebis(thioate)
12.109	3827	11455	4253-89-8	Di-isopropyl disulfide	Disulfide, bis(1-methylethyl); Isopropyl disulfide; 2,5-Dimethyl-3,4- dithiohexane; Bis(1-methylethyl)disulfide;
12.113	3825	11450	352-93-2	Diethyl sulfide	Ethyl thioethane; Ethane, 1,1-thiobis-; Ethyl sulfide; 1,1-Thiobisethane; 3- Thiopentane; Diethylthioether;
12.114		11451	3600-24-6	Diethyl trisulfide	
12.116		11459	5756-24-1	Dimethyl tetrasulfide	
12.118	3878		1618-26-4	2,4-Dithiapentane	Formaldehyde dimethyl mercaptal; bis[methylmercapto]methane; Formaldehyde dimethyl dithioacetal;
12.120	4108		68398-18-5	(+/-)-2,8-Epithio-cis-p-menthane	6- Thiabicyclo[ 3.2.1] octane, 4,7,7- trimethyl-, (Z) -; Zestoril
12.121	3834	11471	23747-43-5	Ethyl 2-(methyldithio)propionate	Ethyl alpha-(methyldithio)propionate;
12.122	3835		4455-13-4	Ethyl 2-(methylthio)acetate	Ethyl (methylthio)acetate; Ethyl 2-methylthioacetate;
12.126	4041	11478	30453-31-7	Ethyl propyl disulfide	Ethyl dithiopropane;
12.127		11479	4110-50-3	Ethyl propyl sulfide	
12.128	3833		7341-17-5	2-Ethylhexane-1-thiol	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.130		11485	1639-09-4	Heptane-1-thiol	Heptyl mercaptan;
12.132	3842	11487	111-31-9	Hexane-1-thiol	Hexyl mercaptan;
12.137	3854		34300-94-2	3-Mercapto-3-methylbutan-1-ol	1-Butanol, 3-mercapto-3-methyl-; 3-Methyl-3-mercaptobutyl alcohol; 3-Mercapto-3-methylbutyl alcohol;
12.138	3855		50746-10-6	3-Mercapto-3-methylbutyl formate	3-Methyl-3-thiobutyl formate; 1- Butanol, 3-mercapto-3-methyl, formate ester; 3-Methyl-3-mercaptobutyl formate;
12.139	4159	11880	7217-59-6	2-Mercaptoanisole	Thioguaiacol; 2-Methoxythiophenol; 2-Methoxybenzenethiol; 2- Methoxybenzene-1-thiol
12.141	3503	2332	23832-18-0	2-Mercaptopinane	pinane-2-thiol; 2,6,6 Trimethyl-bicyclo[3.1.1]heptane-2-thiol
12.142	3503	2332	72361-41-2	3-Mercaptopinane	2,6,6 Trimethyl-bicyclo[3.1.1]heptane- 3-thiol
12.143	3856		24653-75-6	1-Mercaptopropan-2-one	Mercaptoacetone;
12.145	3785		94087-83-9	4-Methoxy-2-methylbutane-2-thiol	
12.146	4003	11525	16630-66-3	Methyl (methylthio)acetate	
12.148	3867		61122-71-2	S-Methyl 4- methylpentanethioate	
12.149	3876		1534-08-3	S-Methyl acetothioate	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.150	3857	11505	5925-68-8	S-Methyl benzothioate	Methane thiobenzoate; S-Methyl thiobenzoate; Methanethiol, benzoate;
12.153	4040	11470	20333-39-5	Methyl ethyl disulfide	
12.154	3860	11474	624-89-5	Methyl ethyl sulfide	(Methylthio)ethane; Sulfide, ethyl methyl; 1-(Methylthio)ethane; 2- Thiobutane; Ethyl methyl thioether;
12.155	3861		31499-71-5	Methyl ethyl trisulfide	2,3,4-Trithiohexane; Ethyl methyl trisulfide;
12.156	3862	11515	20756-86-9	S-Methyl hexanethioate	
12.157	3864	11506	23747-45-7	S-Methyl isopentanethioate	Methane thioisopentanoate; S-methyl 3-methylbutanethioate
12.159		11520	2949-92-0	Methyl methanethiosulfonate	
12.161	3872	11532	14173-25-2	Methyl phenyl disulfide	Phenyl methyl disulfide;
12.162	3873	11533	100-68-5	Methyl phenyl sulfide	Thioanisole; Benzene, (methylthio)-; Sulfide, methyl phenyl-; 1-Phenyl-1- thioethane; Methyl phenyl thioether;
12.163		11538	10152-77-9	Methyl prop-1-enyl sulfide	
12.164		11539	33368-80-8	Methyl prop-1-enyl trisulfide	
12.165	4172		5925-75-7	S-Methyl propanethioate	Propanethioic acid, S- methyl ester; S- Methyl thiopropionate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
12.166		11541	3877-15-4	Methyl propyl sulfide	
12.168	3866		67952-60-7	2-Methyl-2-(methyldithio)propanal	2-Methyl-2-(methyldithio)propionaldehyde; 2-(Methyldithio)isobutyraldehyde;
12.169	3997	11500	19872-52-7	2-Methyl-4-oxopentane-2-thiol	4-Mercapto-4-methylpentan-2-one;
12.170	3896	11511	5287-45-6	3-Methylbut-2-ene-1-thiol	
12.171	3858		541-31-1	3-Methylbutane-1-thiol	Isoamyl mercaptan;
12.173	3874	11536	513-44-0	2-Methylpropane-1-thiol	Isobutyl mercaptan;
12.174		11537	75-66-1	2-Methylpropane-2-thiol	tert-Butylmercaptan;
12.175	3875		67-68-5	Methylsulfinylmethane	Dimethyl-sulfoxide-(INN); Methyl sulfoxide; Dimethyl sulfoxide; DMSO;
12.176	3881		583-92-6	4-(Methylthio)-2-oxobutyric acid	
12.179	4004	11545	5271-38-5	2-(Methylthio)ethan-1-ol	2-(methylthio)ethanol; 2-hydroxyethyl methyl sulfide;
12.187	3879		74758-93-3	Methylthiomethyl butyrate	
12.188	3880		74758-91-1	Methylthiomethyl hexanoate	



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.191	4333		110-66-7	Pentane-1-thiol	Amyl hydrosulfide, Amyl mercaptan, Amyl sulfhydrate, Pentyl mercaptan
12.192	3792		2084-19-7	Pentane-2-thiol	sec-Amylmercaptan; 1- Methylbutanethiol; 2-Mercaptopentane;
12.193	4014	11495	2257-09-2	Phenethyl isothiocyanate	
12.194	3894	11561	4410-99-5	2-Phenylethane-1-thiol	
12.195	3895		33049-93-3	S-Prenyl thioacetate	Ethanethioic acid, S-(3-methyl-2- buten-1-yl) ester; Thioacetic acid, S-(3- methyl-but-2-en-1-yl) ester; 3- Methylbut-2-enyl acetothioate
12.197	3897	11565	75-33-2	Propane-2-thiol	Isopropyl mercaptan;
12.198	4021		423474-44-2	2,3,5-Trithiahexane Thioacetic acid	Trithiahexane; 2,3,5-Methyl (methylthio) methyl disulfide; (Methyldithio) (methylthio) methane; 2,4,5-Trithiahexane;
12.199	4210		507-09-5		Ethanethioic acid; Thiolacetic acid; Acetothioic acid
12.201	3809		94293-57-9	8-Acetylthio-p-menthanone-3	
12.203	3788		74586-09-7	Methylthio 2- (acetyloxy)propionate	
12.211	3820		32951-19-2	But-1-enyl methyl sulphide	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.212	3978		1618-26-4	Ethyl 5-(methylthio)valerate	bis(Methylthio)methane, 2,4-Dithiapentane, Formaldehyde dimethyl dithioacetal, Formaldehyde dimethyl mercaptal, Bis(methyl mercapto) methane, Methylene bis(methyl sulfide) Thioformaldehyde dimethyl acetal, Pentanoic acid, 5-(methylthio)-, ethyl ester
12.214	4150		127931-21-9	(+/-)-Isobutyl 3- methylthiobutyrate	2- Methylpropyl 3-( methylthio) butyrate; 2-Methylpropyl 3-( methylthio) butanoate; Isobutyl 3-( methylthio) butyrate, 2-Methylpropyl 3-(methylthio) butyrate
12.217	3850		51755-83-0	3-Mercaptohexan-1-ol	3-Thiohexanol; 3-Thiohexan-1-ol;
12.218	3865			Methyl-3-methyl-1-butenyl disulphide	
12.227	3790			Methylthio-2-(propionyloxy)propionate	
12.234	3851		136954-20-6	3-Mercaptohexyl acetate	
12.235	3852		136954-21-7	3-Mercaptohexyl butyrate	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.236	3789		51755-85-2	3-(Methylthio)hexyl acetate	
12.237	3883		16630-55-0	3-(Methylthio)propyl acetate	3-Acetoxypropyl methyl sulfide; 1-Propanol, 3-(methylthio)-, acetate; Methionyl acetate;
12.238	3996		227456-27-1	3-Mercapto-2-methylpentan-1-ol	
12.239	3994		227456-28-2	3-Mercapto-2-methylpentanal	
12.240	4214		6540-86-9	2,4,6-Trithiaheptane	bis-(Methylthiomethyl) sulfide
12.241	3995		258823-39-1	2-Mercapto-2-methylpentan-1-ol	
12.242	4185		29414-47-9	Methylthiomethylmercaptan	Methanethiol, 1-methylthio-; (Methylthio) methanethiol
12.244	3882		14109-72-9	1-Methylthio-2-propanone	
12.249	3996		227456-27-1	3-Mercapto-2-methylpentanol (mixture of stereo isomers)	
12.251	3853		136954-22-8	3-Mercaptohexyl hexanoate	
12.252	4158		31539-84-1	(+/-)-4-Mercapto-4-methyl-2-pentanol	2-Pentanol, 4-mercapto-4-methyl-
12.253	4025		72437-68-4	Amyl methyl disulfide	2,3-Dithiaoctane, 1-Methyldisulfanyl-pentane

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
12.254	4027		63986-03-8	Butyl ethyl disulfide	3,4-Dithiaoctane, 1-Ethyldisulfanyl- butane
12.255	3977		156472-94-5	Ethyl 3-mercaptobutyrate	Disulfide, butyl ethyl; 1- Ethyldisulfanylbutane; 3,4- Dithiaoctane
12.256	4042		31499-70-4	Ethyl propyl trisulfide	3,4,5-Trithianonane
12.257	3974		104228-51-5	Ethyl 4-(acetylthio) butyrate	
12.264	4157		92585-08-5	4-Mercapto-2-pentanone	4-Mercaptopentan-2-one
13.001	2702	119	620-02-0	5-Methylfurfural	5-Methyl-2-furaldehyde; 5 Methyl-2- furaldehyde
13.002	2703	358	611-13-2	Methyl 2-furoate	Methyl furoate; Methyl pyromucate; Furan-alpha- carboxylic acid, methyl ester;
13.003	2946	359	615-10-1	Propyl 2-furoate	Propyl furan-2-carboxylate; n-Propyl pyromucate;
13.004	2030	360	4208-49-5	Allyl 2-furoate	Allyl furan-2-carboxylate; Allyl pyromucate; 2- Propenyl furan-2- carboxylate; 2-Propenyl 2- furoate;
13.005	2571	361	39251-86-0	Hexyl 2-furoate	
13.006	2865	362	7149-32-8	Phenethyl 2-furoate	2-Phenylethyl 2-furoate;
13.007	2898	489	3208-40-0	2-(3- Phenylpropyl)tetrahydrofuran	2-Hydrocinnamyl tetrahydrofuran; alpha-(3-phenylpropyl)- tetrahydrofuran;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
13.009	2381	535	119-84-6	3,4-Dihydrocoumarin	Dihydrocoumarin; 1,2- Benzodihydropyrone; Hydrocoumarin; 2-Chromanone; 2-Oxochroman; o- Hydroxydihydrocinnamic acid lactone;
13.010	3174	536	3658-77-3	4-Hydroxy-2,5-dimethylfuran-3(2H)-one	Furaneol; 2,5-Dimethyl-4-hydroxy-2,3-dihydrofuran-3-one;
13.011		545	623-20-1	Ethyl furfuracrylate	Ethyl 3-(2-furyl)prop-2-enoate
13.012	2699	579	92-48-8	6-Methylcoumarin	5-Methyl-2-hydroxyphenylpropenoic acid lactone; 6-Methyl-2H-1- benzopyran-2-one; 6-Methylbenzopyrone; 6-Methyl-1,2- benzopyrone
13.015	3476	722	28588-73-0	bis-(2,5-Dimethyl-3-furyl) disulfide	3,3(1)-Dithiobis(2,5-dimethylfuran);
13.016	3259	723	28588-75-2	bis-(2-Methyl-3-furyl) disulfide	2-Methyl-3-furyl disulphide; 3,3'- Dithio-2,2'- dimethyldifuran;
13.017	3260	724	28588-76-3	bis-(2-Methyl-3-furyl) tetrasulfide	2-Methyl-3-furyl tetrasulphide; 3,3'- Tetrathiobis(2-methylfuran);
13.018	2489	2014	98-01-1	Furfural	Furfuraldehyde; 2- Furancarboxaldehyde; Fural; 2- Formylfuran; 2-Furaldehyde; Pyromucic aldehyde; 2- Furylcarboxaldehyde;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
13.019	2491	2023	98-00-0	Furfuryl alcohol	2-Furancarbinol; Furfuralcohol; alpha-Furylcarbinol; 2-Furylcarbinol; 2-Hydroxymethylfuran;
13.020	3056	2029	97-99-4	Tetrahydrofurfuryl alcohol	Tetrahydro-2-furancarbinol; Tetrahydro-2-furanmethanol; Tetrahydro-2-furylmethanol;
13.021	2070	2080	7779-66-0	Isopentyl 4-(2-furan)butyrate	Isopentyl furyl-2-butyrate; Isoamyl furfurylpropionate; 3-Methylbutyl 2-furanbutyrate; alpha-Isoamyl furfurylpropionate; 3-Methylbutyl 4-(2-furan)butanoate
13.022	2435	2091	10031-90-0	Ethyl 3(2-furyl)propionate	Ethyl 2-furanpropionate; Ethyl furfurylacetate; Ethyl furylpropionate;
13.023	2071	2092	7779-67-1	Isopentyl 3-(2-furan)propionate	Isoamyl furylpropionate; Isoamyl furfurylacetate; Isoamyl furfurhydraacrylate; alpha-Isoamyl furfurylacetate; 3-Methylbutyl 3-(2-furan)propanoate
13.024	2198	2093	105-01-1	Isobutyl 3-(2-furyl)propionate	Isobutyl 2-furanpropionate; Isobutyl furfurylacetate; Isobutyl-2-furanpropionate; 2-Methylpropyl 3-(2-furyl)propanoate

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
13.025	2072	2109	1334-82-3	Pentyl 2-furoate	Amyl 2-furoate; Amyl furan-2- carboxylate; Pentyl furan-2- carboxylate;
13.026	2493	2202	98-02-2	2-Furanmethanethiol	Furfuryl mercaptan; 2-Furylmethane thiol; alpha-Furfuryl mercaptan;
13.027	2076	2205	65504-96-3	2-Pentyl-5 or 6-keto-1,4-dioxane	5-Pentyl-1,4-dioxan-2-one;
13.028	2204	2206	65504-45-2	2-Butyl-5 or 6-keto-1,4-dioxane	5-Butyl-1,4-dioxan-2-one;
13.029	4106	2208	625-86-5	2,5-Dimethylfuran	
13.030	4179	2209	534-22-5	2-Methylfuran	
13.031	3128	2247	4265-16-1	2-Benzofurancarboxaldehyde	2-Formylbenzofuran;
13.032	3161	2248	1883-78-9	Furfuryl isopropyl sulfide	Isopropyl furfuryl sulphide;
13.033	3162	2250	13678-68-7	S-Furfuryl acetothioate	Furfuryl thioacetate;
13.034	2494	2252	623-30-3	3-(2-Furyl)acrylaldehyde	Furyl acrolein; 2-Furanacrolein; Furylacrolein; 3-(2-Furyl)prop-2-enal
13.035	3235	2265	494-90-6	Menthofuran	3,9-Epoxy-p-mentha-3,8-diene; 4,5,6,7-Tetrahydro-3,6-dimethylbenzofuran
13.037	3236	2269	16409-43-1	2-(2-Methylprop-1-enyl)-4-methyltetrahydropyran	Rose oxide; Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran; Rose oxide levo;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.038	3468	2309	50626-02-3	2-Phenyl-3-carbethoxyfuran	Phenyl oxaromate; Ethyl 2-Phenyl-3- furoate; Ethyl 2-phenyl-3-furoate
13.039	3525	2319	22694-96-8	2,4,5-Trimethyl-delta-3-oxazoline	2,4,5-Trimethyl-2,5-dihydrooxazole; 3-Oxazoline, 2,4,5-trimethyl;
13.040	3481	2323	65505-16-0	2,5-Dimethyl-3-thiofuroylfuran	S-(2,5-Dimethyl-3-furyl) thio-2- furoate;
13.041	3482	2324	55764-28-8	2,5-Dimethyl-3-(isopentylthio)furan	S-(2,5-Dimethyl-3-furyl) thioisovalerate; 2,5-Dimethyl-3-(3- methylbutylthio)furan
13.042	3373	2338	3188-00-9	4,5-Dihydro-2-methylfuran-3(2H)-one	Tetrahydro-2-methyl-3-oxofuran; 2-Methyltetrahydrofuran-3-one; Dihydro- 2-methyl-3-furanone; Dihydrofuranone-3(2H)-, 2-methyl;
13.043	2492	11885	770-27-4	Furfurylidene-2-butanal	Furfurylidene-2-butyraldehyde; 3- Ethyl-3(2-furyl)-2-propenal; 2-Ethyl- 3(2-furyl)acrolein; 3(2-furyl)-2- ethylacrolein;
13.044	2495	11838	623-15-4	4-(2-Furyl)but-3-en-2-one	Furfurylidine acetone; Furfuralacetone;
13.045	2496	11837	6975-60-6	1-(2-Furyl)-propan-2-one	Furfuryl methyl ketone; 2- Acetonylfuran; Furyl acetone; Methyl furfuryl ketone;



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
13.046	2704	11878	874-66-8	3-(2-Furyl)-2-methylprop-2-enal	2-Furfurylidenepropionaldehyde; 2- Methyl-3-furylacrolein; alpha-Methyl- beta-furylacrolein; Furfurylidene-2- propanal;
13.047	2945	11842	623-22-3	Propyl 3-(2-furyl)acrylate	Propyl furanacrylate; Propyl furylacrylate; Propyl 3(2-furyl)prop-2- enoate
13.048	3057	11841	2217-33-6	Tetrahydrofurfuryl butyrate	Tetrahydro-2-furylmethyl n- Butanoate; Tetrahydrofurfuryl n- Butyrate;
13.049	3058	11843	637-65-0	Tetrahydrofurfuryl propionate	2-Tetrahydrofurylmethyl propionate;
13.050	3146	11480	4437-20-1	Difurfuryl disulfide	Bis-(2-furfuryl)disulfide; 2-Furfuryl disulphide;
13.051	3158	11770	59020-90-5	2-Furfuryl thioformate	2-Furylmethanethiol formate; Furfurylthio formate;
13.052	3159	10944	13679-46-4	Furfuryl methyl ether	Methyl furfuryl ether;
13.053	3160	11482	1438-91-1	Methyl furfuryl sulfide	
13.054	3163	11653	1192-62-7	2-Acetylfuran	2-Furyl methyl ketone; Methyl 2-Furyl ketone;
13.055	3188	11678	28588-74-1	2-Methylfuran-3-thiol	2-Methyl-3-furylmercaptan;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.056	3238	11438	13678-67-6	Difurfuryl sulfide	2,2'- (Thiodimethylene)-difuran; 2- Furfuryl monosulphide; Difurfuryl monosulphide;
13.057	3283	10642	13678-60-9	Furfuryl isovalerate	Furfuryl 3-methylbutanoate
13.058	3307	10355	31704-80-0	3-(5-Methyl-2-furyl) butanal	2 Furanpropanal, beta,5-dimethyl-; 3- (5-Methyl-2-furyl)butyraldehyde;
13.059	3317	10966	3777-69-3	2-Pentylfuran	2-Amylfuran;
13.060	3320	11821	65505-25-1	Tetrahydrofurfuryl cinnamate	Cinnamic acid, tetrahydrofurfuryl ester; Tetrahydro-2-furylmethyl 3- phenylpropenoate; Tetrahydro-2- furylmethyl cinnamate; Tetrahydrofurfuryl 3-phenylprop-2- enoate
13.061	3337	10930	4437-22-3	Difurfuryl ether	Furfuryl ether;
13.062	3346	10646	623-19-8	Furfuryl propionate	Furfuryl propanoate;
13.063	3347	11484	59020-85-8	S-Furfuryl propanethioate	Furfuryl thiopropanoate;
13.064	3362	11513	57500-00-2	Methyl furfuryl disulfide	Furfuryl methyl disulphide; Methyl 2- furylmethyl disulphide;
13.065	3366	11550	13678-59-6	2-Methyl-5-(methylthio)furan	Methyl 5-methyl-2-furyl sulfide; (5- Methylfuryl-2)-thiomethane;
13.066	3391	10921	10599-70-9	3-Acetyl-2,5-dimethylfuran	2,5-Dimethyl-3-acetylfuran;
13.067	3396	10645	39252-03-4	Furfuryl octanoate	alpha-Furfuryl caprylate;
13.068	3397	10647	36701-01-6	Furfuryl valerate	Furfuryl pentanoate; alpha-Furfuryl pentanoate; alpha-Furfuryl valerate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.069	3401	10952	3777-71-7	2-Heptylfuran	
13.070	3418	11180	14360-50-0	2-Hexanoylfuran	2-Furyl pentyl ketone;
13.071	3451	11457	55764-23-3	2,5-Dimethylfuran-3-thiol	2,5-Dimethyl-3-mercaptofuran; 2,5- Dimethyl-3-furylmercaptan;
13.072	3471	10514	3738-00-9	1,5,5,9-Tetramethyl-13-oxatricyclo [8.3.0.0.(4.9)]tridecane	Tetramethyl-perhydronaphthofuran;
13.073	3518	10864	39251-88-2	Octyl 2-furoate	Octyl 2-furancarboxylate;
13.074	3535	11913	3782-00-1	2,3-Dimethylbenzofuran	
13.075	3538	11915	61295-51-0	2,6-Dimethyl-3-((2-methyl-3-furyl)thio)heptan-4-one	1,3-Diisopropylacetyl-2-methyl-3- furyl sulphide; 3((2-methyl-3- furyl)thio)-2,6-dimethyl-4-heptanone;
13.076	3549	11917	65620-50-0	6-Hydroxydihydrotheaspirane	6-Hydroxy-2,6,10,10-tetramethyl-1-oxaspiro(4,5)decane; 2,6,10,10- Tetramethyl-1-oxaspiro[4.5]decan-6- ol
13.077	3570	11922	61295-41-8	3-((2-Methyl-3-furyl)thio)heptan-4-one	1,3-Diethylacetyl 2-methyl-3-furyl sulfide;
13.078	3571	11923	61295-50-9	4-((2-Methyl-3-furyl)thio)nonan-5-one	1,3-Dipropylacetyl 2-methyl-3-furyl sulfide;
13.079	3573	11924	65505-17-1	Methyl 2-methyl-3-furyl disulfide	
13.082	3607		61197-09-9	Propyl 2-methyl-3-furyl disulfide	2-Methyl-3-furyl propyl disulphide;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.083	3609	11038	1193-79-9	2-Acetyl-5-methylfuran	Methyl 5-methyl-2-furyl ketone; Ethanone, 1-(5-methyl-2-furyl)-; 1- (5-methyl-2-furyl)ethanone;
13.084	3623		27538-09-6	2-Ethyl-4-hydroxy-5-methyl-3(2H)-furanone	5-Ethyl-4-hydroxy-2-methyl-3(2h)-furanone;
13.085	3635	11785	19322-27-1	4-Hydroxy-5-methylfuran-3(2H)-one	2,3-Dihydro-4-hydroxy-5-methylfuran- 3-one; 5-Methyl-4-hydroxy-3(2H)- furanone;
13.086	3636		26486-14-6	4,5-Dihydro-2-methyl-3-thioacetoxyfuran	2-Methyl-4,5-dihydro-3-furanthiol acetate; 4,5-Dihydro-2-methyl-3- furanthiol acetate;
13.087	3651		57893-27-3	6-Acetoxydihydrotheaspirane	2.6.10.10- Tetramethyl-1- oxaspiro(4.5)dec-6-yl acetate; 2.6.10.10- Tetramethyl-1-oxaspiro[4.5]decan-6-yl acetate
13.088	3661		1786-08-9	3,6-Dihydro-4-methyl-2-(2-methylprop-1-en-1-yl)-2H-pyran	3,6-Dihydro-4-methyl-2-(2-methyl-1-propenyl)-2H-pyran;
13.089	3664		4077-47-8	2,5-Dimethyl-4-methoxyfuran-3(2H)-one	Mesifurane; 4-Methoxy-2,5-dimethyl- 3-furanone;
13.090	3665	10937	7416-35-5	2,2-Dimethyl-5-(1-methylprop-1-enyl)tetrahydrofuran	Tetrahydrofuran, 2,2-dimethyl-5-(1- methyl-1-propenyl)-;
13.091	3672		53833-30-0	4,5-Dimethyl-2-ethyloxazole	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.092	3673	11706	3208-16-0	2-Ethylfuran	2-Ethyloxole;
13.093	3674		94278-27-0	Ethyl 3-(2-furfurylthio)propionate	Ethyl beta-furfuryl alpha- thiopropionate; Ethyl beta-furfuryl- alpha-thiopropionate;
13.094	3735	10976	7392-19-0	2,6,6-Trimethyl-2-vinyltetrahydropyran	Bois de rose oxide;
13.095	3743	11882	41239-48-9	2,5-Diethyltetrahydrofuran	Tetrahydrofuran, 2,5-diethyl-; Furan, 2,5-diethyltetrahydro-;
13.096	3746	2214	5989-33-3	5(2-Hydroxyisopropyl)-2-methyl-2-vinyltetrahydrofuran	Linalool oxide B (cis, 5-ring);
13.097	3759	11944	13679-86-2	Anhydrolinalool oxide (5)	Anhydro linalool oxide; Dehydroxy linalool oxide; 2-(1-Methylene-ethyl)- 5-methyl-5-vinyltetrahydrofuran
13.098	3774	10515	36431-72-8	Theaspirane	1-Oxaspiro-2,6,10,10-tetra- methyl[4.5]dec-6-ene-; 2,6,10,10- Tetramethyl-1-oxaspiro[4.5]dec-6-ene
13.099	3797		4166-20-5	4-Acetoxy-2,5-dimethylfuran-3(2H)-one	
13.100		11941	13678-73-4	2-Acetyl-1-furfurylpyrrole	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.101	4071		22940-86-9	2- Acetyl- 3,5- dimethylfuran	Ethanone, 1-( 3,5- dimethyl- 2- furanyl) -; Ketone, 3,5- dimethyl- 2- furyl methyl; 3,5- Dimethyl- 2- furyl methyl ketone
13.103	4081	10927	4466-24-4	2-Butylfuran	
13.105	4083	11045	100113-53-9	2-Butyrylfuran	2-Furyl propyl ketone;
13.106	4090		83469-85-6	2-Decylfuran	
13.107	4095		64280-32-6	2,4-Difurfurylfuran	
13.109		10931	17092-92-1	Dihydroactinidiolide	2,2,6-Trimethyl-7-oxa- bicyclo[4.3.0]non-9-ene
13.112		11379	53833-32-2	4,5-Dimethyl-2-propyloxazole	
13.116	4034		55764-22-2	2,5-Dimethyl-3-furanthiol acetate	S-(2,5-Dimethyl-3-furyl) ethanethioate, Thioacetic acid S-(2,5- dimethyl-furan-3-yl) ester
13.117	4104		65330-49-6	2,5- Dimethyl- 4-ethoxy- 3( 2H)- furanone	3(2H)- Furanone, 4- ethoxy- 2,5- dimethyl-; 2,3- Dihydro- 2,5- dimethyl- 4- ethoxy- 3- furanone; 2,5- Dimethyl- 2,3- dihydro- 4- ethoxyfuran- 3- one; 2,5- Dimethyl- 4- ethoxy- 2H- furan- 3- one
13.119		11066	14400-67-0	2,5-Dimethylfuran-3(2H)-one	
13.122		10588	614-99-3	Ethyl 2-furoate	
13.123	4114	10940	6270-56-0	Ethyl furfuryl ether	2-(Ethoxymethyl)furan;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
13.125		10942	1703-52-2	2-Ethyl-5-methylfuran	
13.127		10643	13678-61-0	Furfuryl 2-methylbutyrate	
13.128	2490	2065	623-17-6	Furfuryl acetate	
13.130		638	623-21-2	Furfuryl butyrate	
13.133		10641	6270-55-9	Furfuryl isobutyrate	Furfuryl 2-methylpropanoate
13.134	3284	2317	1438-94-4	1-Furfurylpyrrole	1-furfuryl-1H-pyrrole;
13.136		10098	88-14-2	2-Furoic acid	2- Furancarboxylic acid
13.137	3586	11928	65545-81-5	3-(2-Furyl)-2-phenylprop-2-enal	
13.138	4120	11084	699-17-2	1-(2-Furyl)butan-3-one	4-(2- Furyl) butan-2-one;
13.139		11112	67-47-0	5-Hydroxymethylfurfuraldehyde	5-(Hydroxymethyl)-2-furaldehyde;
13.140	3746	11876	1365-19-1	Linalool oxide (5-ring)	5-(1-hydroxy-1-isopropyl)-2-methyl-2- vinyl tetrahydrofuran
13.142	3311	11547	13679-61-3	S-Methyl 2-furanthiocarboxylate	Furoylthiomethane; Methyl thio-2- furoate;
13.145		11522	13679-60-2	Methyl 5-methylfurfuryl sulfide	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.148	4174		15186-51-3	3-Methyl-2-(3-methylbut-2-enyl)-furan	2-(3-Methyl-2-butenyl)-3- methylfuran, alpha-Naginatene; gamma- Clausenane; Rosefuran;Furan, 3- methyl- 2-( 3- methyl- 2- butenyl) -
13.150	4175		5555-90-8	3-(5-Methyl-2-furyl)prop-2-enal	3-( 5- Methylfuryl) acrolein; 1-( 5- Methyl- 2- furanyl)- 1- propen- 3- al; 3-( 5- Methyl- 2- furanyl)- 2- propenal; 5- Methyl- 2- furanacrolein; 2- Propenal, 3-( 5- methyl- 2- furanyl) -
13.151	3189	2287	65530-53-2	2-Methyl-3,5 and 6-(furfurylthio)pyrazine	Methyl(furfurylthio)pyrazine (mixture of isomers);
13.152	3949		63012-97-5	2-Methyl-3-(methylthio)furan	Dimethylthiofurane;
13.153	3973		55764-25-5	2-Methyl-3-furyl thioacetate	Ethanethioic acid, S-(2-methyl-3- furanyl) ester, 3-(Acetylthio)-2- methylfuran; 3-(Acetylthio)-2- methylfuran,
13.155		11158	10599-69-6	2-Methyl-5-propionylfuran	1-(5 -methyl-2-furyl)propan-1-one;
13.157	4176		3511-32-8	5-Methyl- 3( 2H)- furanone	3(2H)- Furanone, 5- methyl-
13.160	3787		57124-87-5	2-Methyltetrahydrofuran-3-thiol	



<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
13.161	3791		4430-31-3	Octahydrocoumarin	Bicyclononalactone; Cyclohexyl lactone; Octahydro-2H-1-benzopyran- 2-one; Octahydro-1(2H)-benzopyran-2- one
13.162		10965	4179-38-8	2-Octylfuran	
13.163	4192		3194-17-0	2-Pentanoylfuran	1-( 2- Furanyl)- 1- pentanone; Butyl 2- furyl ketone; 1- Pentanone, 1-( 2- furanyl) -; 1- Pentanone, 1-( 2- furyl) -
13.165	3822		5552-30-7	6,7,8,8a-Tetrahydro-2,5,5,8a-tetramethyl-5H-1-benzopyran	Cycloionone
13.166	3055	2069	637-64-9	Tetrahydrofurfuryl acetate	
13.169		11424	20662-84-4	Trimethyloxazole	2,4,5-trimethyloxazole;
13.175	4070		22940-86-9	4- Acetyl- 2,5-dimethyl- 3( 2H)- furan	3( 2H)- Furanone, 4- acetyl- 2,5- dimethyl-
13.188	3189		59303-07-0	2-Methyl-3-furfurylthiopyrazine	
13.190	4056		61295-44-1	3-[(2-Methyl-3-furyl)thio]-2-butanone	2-Butanone, 3-[(2-methyl-3- furanyl)thio]-; 3-[(2-Methyl-3- furyl)sulfanyl]-2-butanone; 3-[(2-Methyl-3-furanyl)sulfanyl] -2- butanone; 3-(2-Methyl-3-furylthio)-2- butanone

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
13.191	4043		376595-42-5	O-Ethyl S-(2- furylmethyl)thiocarbonate	O-Ethyl S-(furan-2- ylmethyl)thiocarbonate; O-Ethyl S-(2- furanylmethyl)thiocarbonate; Carbonothioic acid, O-ethyl S-(2- furanylmethyl) ester;
13.193	3971		26486-21-5	2,5-Dimethyltetrahydro-3-furanthiol	O-Ethyl S-(2-furanylmethyl)carbonothioate; Ethoxy carbonyl furfurylthiol
13.194	3972		252736-39-3	2,5-Dimethyltetrahydro-3-furyl thio acetate	
13.196	3840		180031-78-1	4-(Furfurylthio) pentan-2-one	
13.197	3979		252736-36-0	Furyl propyldisulfide	
14.001	2978	487	119-65-3	Isoquinoline	2-Azanaphthalene; 2-Benzazine; 3,4-Benzopyrine; BenzoPyrine;
14.002		488	491-35-0	4-Methylquinoline	Lepidine;
14.003	2909	492	94-62-2	Piperine	1-Piperoylpiperidine; Piperoylpiperidine; 1-(5-(3,4- Methylenedioxyphenyl)-1-oxo-2,4-pentadienyl)piperidine
14.004	3019	493	83-34-1	3-Methylindole	Skatole; 3-Methyl-4,5-benzopyrrole; Beta-Methylindole;
14.005	3136	534	15707-24-1	2,3-Diethylpyrazine	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
14.006	3155	548	15707-23-0	2-Ethyl-3-methylpyrazine	
14.007	2593	560	120-72-9	Indole	Benzopyrrole; 1-benzazole; 1- Benzazole; 1- BenzoPyrrole; 2,3- Benzopyrrole;
14.008	2966	604	110-86-1	Pyridine	Azine; Azabenzene;
14.010	2908	675	110-89-4	Piperidine	Hexahydropyridine; Hexazana; Pentamethylenimine;
14.011	2976	715	130-89-2	Quinine hydrochloride	Quinine chloride; Quinine monohydrochloride;
14.014	3338	720	36267-71-7	5,7-Dihydro-2-methylthieno(3,4-d)pyrimidine	
14.015	3321	721	34413-35-9	5,6,7,8-Tetrahydroquinoxaline	Cyclohexapyrazine; Tetrahydroquinoxaline;
14.016	3149	727	27043-05-6	2,5-Dimethyl-3-ethylpyrazine	
14.017	3154	728	13360-64-0	2-Ethyl-5-methylpyrazine	2-Methyl-5-ethyl pyrazine; 2-Methyl- 5-ethylpyrazine;
14.018	3237	734	1124-11-4	2,3,5,6-Tetramethylpyrazine	
14.019	3244	735	14667-55-1	2,3,5-Trimethylpyrazine	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
14.020	3272	2210	123-32-0	2,5-Dimethylpyrazine	2,5-Dimethyl-1,4-diazine; Glycoline; Ketine; 2,5-Dimethyl-1,4-diazine; 2,5- Dimethylparadiazine; 2,5- Dimethylpiazine;
14.021	3273	2211	108-50-9	2,6-Dimethylpyrazine	2,6-Dimethyl-1,4-diazine; 2,6- Dimethyl-1,4-diazine; 2,6- Dimethylparadiazine; 2,6- Dimethylpiazine;
14.022	3281	2213	13925-00-3	Ethylpyrazine	2-Ethyl pyrazine; 2-Ethyl-1,4-diazine; 2-Ethyl-1,4-diazine;
14.023		2217	96-54-8	1-Methylpyrrole	N-Methylpyrrole;
14.024	3150	2245	13925-07-0	2-Ethyl-3,5-dimethylpyrazine	2,6-Dimethyl-3-ethylpyrazine;
14.025	3183	2266	63450-30-6	2,5 or 6-Methoxy-3- methylpyrazine	Methylmethoxypyrazine;
14.026	3554	2268	13925-05-8	2-Isopropyl-5-methylpyrazine	5-Isopropyl-2-methylpyrazine; 2- Methyl-5-isopropylpyrazine;
14.027	3309	2270	109-08-0	2-Methylpyrazine	2-Methyl-1,4-diazine;
14.028	3203	2271	13708-12-8	5-Methylquinoxaline	
14.029	3727	2277	65504-93-0	1-Phenyl-(3 or 5)- propylpyrazole	1-Phenyl-3 or 5-propyl-1,2-diazole;
14.030	3232	2279	2044-73-7	2-Pyridine methanethiol	2-Mercaptomethylpyridine; 2-Pyridylmethanethiol; 2-Pyridylmethyl mercaptan;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
14.031	3230	2285	35250-53-4	Pyrazineethanethiol	2-Pyrazinylethanethiol; Pyrazinyl ethanethiol;
14.032	3126	2286	22047-25-2	Acetylpyrazine	2-Acetylpyrazine; Methyl pyrazinyl ketone;
14.034	3231	2288	21948-70-9	Pyrazinyl methyl sulfide	2-Methylthiopyrazine; Pyrazinylmethyl methyl sulphide; (Methylthio)pyrazine
14.035	3208	2290	67952-65-2	2-Methyl-3,5 or 6- methylthiopyrazine	Methyl(methylthio)pyrazine (mixture of isomers);
14.037	3306	2314	23747-48-0	6,7-Dihydro-5-methyl-5H-cyclopentapyrazine	
14.038	3251	2315	1122-62-9	2-Acetylpyridine	Methyl-2-pyridyl ketone; 2- Acetopyridine;
14.039	3424	2316	350-03-8	3-Acetylpyridine	beta-Acetylpyridine; Methyl 3-pyridyl ketone; Methyl Beta-Pyridyl ketone; Methyl pyridyl ketone;
14.041	3386	2318	109-97-7	Pyrrole	Azole; Divinyleneimine; Imidole;
14.042	2744	2339	91-62-3	6-Methylquinoline	p-Methylquinoline; p-Toluquinoline;
14.043	3132	11338	24683-00-9	2-Isobutyl-3-methoxypyrazine	2-Butyl-3-methoxypyrazine; 2- Methoxy-3-isobutyl pyrazine;
14.044	3133		13925-06-9	2-Isobutyl-3-methylpyrazine	2-Butyl-3-methylpyrazine; 2-methyl-3-isobutylpyrazine; 2-(2-Methylpropyl)-3-methylpyrazine

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
14.045	3147	11371	39741-41-8	2-Acetyl-1-ethylpyrrole	1-Ethyl-2-acetylazole;
14.046	3184	11373	932-16-1	2-Acetyl-1-methylpyrrole	1-Methylpyrrol-2-yl methyl ketone; 2- Acetyl-n-methyl pyrrol; Methyl 1- methylpyrrol-2-yl ketone;
14.047	3202	11721	1072-83-9	2-Acetylpyrrole	Methyl-2-pyrrolyl ketone; 2- Acetopyrrole; 2-Pyrrolyl methyl ketone;
14.049	3250	11293	32974-92-8	2-Acetyl-3-ethylpyrazine	2-Ethyl-3-pyrazinyl methyl ketone; 2- Acetyl 3-ethyl-1,4-diazine;
14.050	3271	11323	5910-89-4	2,3-Dimethylpyrazine	2,3-Dimethyl-1,4-diazine;
14.051	3280	11329	68739-00-4	2,5 or 6-Methoxy-3- ethylpyrazine	3-Ethyl-(5 or 6)-methoxypyrazine; 5 or 6-Methoxy-3-ethyl-pyrazine; 2,5 or 6-methoxy-3-ethylpyrazine;
14.052	3296	11341	38713-41-6	Isopropenylpyrazine	2-Isopropenyl-1,4-diazine; (1- Methylene-ethyl)pyrazine
14.053	3299	11502	59021-02-2	Mercaptomethylpyrazine	Pyrazine methanethiol;
14.054	3302	11347	3149-28-8	Methoxypyrazine	2 Methoxy-1,4-diazine;
14.055	3327	11294	54300-08-2	2-Acetyl-3,5-dimethylpyrazine	
14.056	3336	11303	18138-04-0	2,3-Diethyl-5-methylpyrazine	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
14.057	3358	11344	25773-40-4	2-Isopropyl-3-methoxypyrazine	
14.058	3370	11395	6304-24-1	2-Isobutylpyridine	2-Butylpyridine; 2-(2- Methylpropyl)pyridine
14.059	3371	11396	14159-61-6	3-Isobutylpyridine	3-Butylpyridine; 3-(2- Methylpropyl)pyridine
14.060	3383	11412	2294-76-0	2-Pentylpyridine	2-Amylpyridine;
14.061	3394	11386	536-78-7	3-Ethylpyridine	Beta-Ethylpyridine; Beta-Lutidine;
14.062	3433	11300	24168-70-5	2-(sec-Butyl)-3-methoxypyrazine	2-But-2-yl-3-methoxypyrazine; 2- Methoxy-3-sec-Butylpyrazine; 2-(1- Methylpropyl)-3-methoxypyrazine
14.063	3470	11364	91-22-5	Quinoline	1-Benzazine; 2,3-Benzopyrine; Benzopyrine; Chinolein; Leucoline; 1- Azanepthalene; Leucol; 2,3- Benzopyridine
14.064	3523	10491	123-75-1	Pyrrolidine	Tetramethylenimine; Tetrahydropyrrole
14.065	3540	11381	108-48-5	2,6-Dimethylpyridine	2,6-Lutidine;
14.066	3546	11385	104-90-5	5-Ethyl-2-methylpyridine	5-Ethyl-2-picoline; 2-Methyl-5- ethylpyridine;
14.067	3569	11921	32737-14-7	2-Methyl-3,5 or 6- ethoxypyrazine	

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
14.068	3614	11942	1073-26-3	2-Propionylpyrrole	Ethyl 2-pyrrolyl ketone;
14.069	3631		28217-92-7	Cyclohexylmethylpyrazine	2-Pyrazine cyclohexyl methyl; 2- Pyrazinyl cyclohexyl methyl;
14.070	3654		67860-38-2	4-Acetyl-2-methylpyrimidine	Ethanone, 1-(2-methyl-4-pyrimidinyl)-
14.071	3709		93-60-7	Methyl nicotinate	3-Carbomethoxypyridine; Methyl 3-pyridinecarboxylate
14.072	3751		2110-18-1	2-(3-Phenylpropyl)pyridine	
14.076	3183	2266	2847-30-5	2-Methoxy-(3,5 or 6)- methylpyrazine	
14.077	3280	11329	68739-00-4	2-Ethyl-(3,5 or 6)- methoxypyrazine (85%) and 2- Methyl-(3,5 or 6)- methoxypyrazine (13%)	
14.078	3358	11344	93905-03-4	2-Isopropyl-(5 or 6)- methoxypyrazine	
14.080	4249		99583-29-6	2-Acetyl-1-pyrroline	
14.082	3964	11296	23787-80-6	2-Acetyl-3-methylpyrazine	
14.084		11297	22047-27-4	2-Acetyl-5-methylpyrazine	
14.086		11295	34413-34-8	2-Acetyl-6-ethylpyrazine	



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
14.087		11298	22047-26-3	2-Acetyl-6-methylpyrazine	
14.095	3916	11305	18138-05-1	3,5-Diethyl-2-methylpyrazine	2,6-Diethyl-3-methylpyrazine;
14.096	3915	11304	32736-91-7	2,5-Diethyl-3-methylpyrazine	
14.097		11306	13238-84-1	2,5-Diethylpyrazine	
14.098	3917	11309	38917-62-3	6,7-Dihydro-2,3-dimethyl-5H-cyclopentapyrazine	
14.100	3149	727	55031-15-7	3,(5- or 6-)Dimethyl-2- ethylpyrazine	2,(5 or 6)- Dimethyl-3-ethylpyrazine; 2-Ethyl-3,5(6)-dimethyl pyrazine; 3- Ethyl-2,5(6)-dimethyl pyrazine;
14.101		11318	40790-20-3	2,5-Dimethyl-3-isopropylpyrazine	
14.104	4389		108-47-4	2,4-Dimethylpyridine	
14.106		11382	591-22-0	3,5-Dimethylpyridine	
14.107		11383	625-84-3	2,5-Dimethylpyrrole	2,5-dimethyl-1H-pyrrole;
14.109	3569	11325	32737-14-7	2-Ethoxy-3-methylpyrazine	
14.111	3149	2246	13360-65-1	3-Ethyl-2,5-dimethylpyrazine	
14.112	3280	11329	25680-58-4	2-Ethyl-3-methoxypyrazine	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
14.114	3919	11331	13925-03-6	2-Ethyl-6-methylpyrazine	2-Methyl-6-ethylpyrazine; 6-Methyl-2-ethylpyrazine;
14.115		11767	100-71-0	2-Ethylpyridine	
14.116		11387	536-75-4	4-Ethylpyridine	
14.121	3358	11344	93905-03-4	2-Isopropyl-(3,5 or 6)- methoxypyrazine	
14.122		11342	67952-59-4	2-Isopropyl-3-methylthiopyrazine	2-(1-methylethyl)-3-(methylthio)pyrazine
14.123	3940	11343	29460-90-0	Isopropylpyrazine	(2-Methylpropyl)pyrazine
14.124		11400	644-98-4	2-Isopropylpyridine	
14.126	3183	2266	2847-30-5	2-Methoxy-3-methylpyrazine	2-Methyl-3-methoxypyrazine;
14.133	4244		109-05-7	2-Methylpiperidine	2- Pipecoline; (+/-)- alpha- Pipecoline; (+/-)- 2-Methylpiperidine; alpha- Methylpiperidine; alpha- Pipecoline; DL- 2- Methylpiperidine
14.134		11415	109-06-8	2-Methylpyridine	alpha-Picoline; 2-Picoline;
14.135		11801	108-99-6	3-Methylpyridine	beta-Picoline; 3-Picoline;
14.136		11416	108-89-4	4-Methylpyridine	gamma-Picoline; 4-Picoline;
14.138		11358	91-63-4	2-Methylquinoline	Quinaldine;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
14.141	4250		110-85-0	Piperazine	1,4- Diazocyclohexane; 1,4- Piperazine; Antiren; Diethylenediamine; Dispermine; Eraverm; Hexahydropyrazine; Lumbrical; Piperizidine; Pipersol; Pyrazine hexahydride; Uvilon; Vermex; Worm- a- Ton; Wurmirazin
14.142	3961	11362	18138-03-9	Propylpyrazine	2-Propylpyrazine
14.143		11419	4673-31-8	3-Propylpyridine	
14.144	4015	11363	290-37-9	Pyrazine	
14.145		11393	1003-29-8	Pyrrole-2-carbaldehyde	2-Formylpyrrole;
14.147		11365	91-19-0	Quinoxaline	1,4-Benzodiazine;
14.152	2977	717	6119-70-6	Quinine sulphate	
14.161		11310		6,7-Dihydro-2,5-dimethyl-5H-cyclopentapyrazine	
14.164	4065		622-39-9	2-Propylpyridine	Conyrine, 2-n-Propylpyridine, 1-(2-Pyridyl)propane
15.001	3062	478	7774-74-5	2-Mercaptothiophene	2-Thionyl mercaptan; 2- Thiophenethiol;
15.002	3192	736	38205-64-0	2-Methyl-5-methoxythiazole	5-Methoxy-2-methylthiazole;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
15.004	3209	2203	13679-70-4	5-Methyl-2-thiophenecarbaldehyde	2-Formyl-5-methylthiophen; 2- Thiophene carboxaldehyde,5-methyl; 2-Thiophenecarbaldehyde,5-methyl-;
15.005	3145	2237	65505-18-2	2,4-Dimethyl-5-vinylthiazole	
15.006	3450	2322	55704-78-4	2,5-Dihydroxy-2,5-dimethyl-1,4-dithiane	2,5-Dimethyl-2,5-dihydroxy-p-dithiane;
15.007	3270	2325	38325-25-6	spiro(2,4-Dithia-1-methyl-8-oxabicyclo[3.3.0]octane-3,3'-(1'-oxa-2'-methyl)-cyclopentane) and spiro(Dithia-6-methyl-7-oxabicyclo[3.3.0]octane-3,3'-(1'-oxa-2-methyl)cyclopentane)	Spiro [dithia-6-methyl-7-oxabicyclo [3.3.0] octane-3,3alpha-(1 alpha-oxa-2-methyl)cyclopentane] (isomere component);
15.008	3323	2333	6911-51-9	2-Thienyl disulfide	2,2-Dithiodithiophene; 2,2alpha-Dithiodithiophene;
15.009	3475	2334	828-26-2	Trithioacetone	2,2,4,4,6,6-Hexamethyl-s-Trithiane; 2,2,4,4,6,6-Hexamethyl-1,3,5-trithiane
15.010	3817	2335	29926-41-8	2-Acetyl-2-thiazoline	Acetyl thiazoline-2; 2-Acetyl-4,5-dihydrothiazole;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
15.011	3267	2336	38205-60-6	5-Acetyl-2,4-dimethylthiazole	2,4-Dimethyl-5-acetylthiazole; 2,4- Dimethyl-5-thiazoyl methyl ketone;
15.012	3266	2337	1003-04-9	4,5-Dihydrothiophen-3(2H)-one	3-Tetrahydrothiophenone; 3- Thiophenone; Tetrahydrothiophen-3- one; Dihydrothiophenone;
15.013	3134	11618	18640-74-9	2-Isobutylthiazole	Thiazole, 2-isobutyl; 2-(2- Methylpropyl)thiazole
15.014	3204	11621	137-00-8	5-(2-Hydroxyethyl)-4-methylthiazole	4-Methyl-5-thiazole ethanol; Sulfurol; 5-Thiazoleethanol, 4-methyl-;
15.015	3205	11620	656-53-1	4-Methyl-5-(2-acetoxyethyl)thiazole	4-Methyl-5-thiazoleethanol acetate; 5-Thiazoleethanol, 4-methyl-, acetate;
15.016	3256	11594	95-16-9	Benzothiazole	
15.017	3274	11606	3581-91-7	4,5-Dimethylthiazole	
15.018	3313	11633	1759-28-0	4-Methyl-5-vinylthiazole	Thiazole, 4-methyl-5-vinyl;
15.019	3325	11650	13623-11-5	2,4,5-Trimethylthiazole	
15.020	3328	11726	24295-03-2	2-Acetylthiazole	Methyl-2-thiazoyl ketone; Ethanone, 1- (2-thiazolyl)-; 2-Thiazolyl methyl ketone;
15.021	3340	11611	15679-19-3	2-Ethoxythiazole	2-Thiazolyl ethyl ether; Ethyl 2- thiazolyl ether;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
15.022	3372	11598	18277-27-5	2-(sec-Butyl)thiazole	2-But-2-ylthiazole; Thiazole, 2-sec-butyl-; 2-(1-Methylpropyl)thiazole
15.023	3512	11601	13679-85-1	4,5-Dihydro-2-methylthiophene-3(2H)-one	2-Methyltetrahydrothiophen-3-one; 2-Methyl-4,5-dihydrothiophen-3-one; 2-Methylthiolan-3-one; Dihydrothiophenone-3(2H), 2-methyl-
15.024	3527	11603	2530-10-1	3-Acetyl-2,5-dimethylthiophene	2,5-Dimethyl-3-thienyl methyl ketone; Ethanone, 1-(2,5-dimethyl-3-thienyl)-;
15.025	3541	11883	23654-92-4	3,5-Dimethyl-1,2,4-trithiolane	
15.026	3555		15679-13-7	2-Isopropyl-4-methylthiazole	Thiazole, 2-isopropyl-4-methyl-;
15.027	3611		43039-98-1	2-Propionylthiazole	Thiazole, 2-propionyl-;
15.028	3615	11642	288-47-1	Thiazole	
15.029	3619		65894-82-8	2-(sec-Butyl)-4,5-dimethyl-3-thiazoline	2,5-Dihydro-4,5-dimethyl-2-but-2-ylthiazole; 2-(1-Methylpropyl)-4,5-dimethyl-3-thiazoline
15.030	3620		76788-46-0	4,5-Dimethyl-2-ethyl-3-thiazoline	2-Ethyl-4,5-dimethyl-3-thiazoline;
15.032	3621		65894-83-9	4,5-Dimethyl-2-isobutyl-3-thiazoline	4,5-Dimethyl-2-(2-methylpropyl)-3-thiazoline; 3-Thiazoline, 4,5-dimethyl-2-(2-methylpropyl)-;
15.033	3680	11612	15679-12-6	2-Ethyl 4-methylthiazole	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
15.034	3705		5616-51-3	2-Methyl-1,3-dithiolane	
15.035	3716	11627	693-95-8	4-Methylthiazole	
15.036	3718		43040-01-3	3-Methyl-1,2,4-trithiane	
15.037		11590	13679-72-6	2-Acetyl-3-methylthiophene	1-(3-methyl-2-thienyl)ethan-1-one.;
15.038		11589	7533-07-5	2-Acetyl-4-methylthiazole	
15.040		11728	88-15-3	2-Acetylthiophene	Methyl 2-thienyl ketone;
15.043		11596	54411-06-2	2-Butyl-5-ethylthiophene	
15.044		11597	37645-61-7	2-Butylthiazole	
15.049	4030		54644-28-9	3,5-Diethyl-1,2,4-trithiolane	1,2,4-Trithiolane, 3,5-diethyl-, (+/-)
15.057	3782		104691-40-9	4,6-Dimethyl-2-(1-methylethyl)dihydro-1,3,5-dithiazine	2(4)-Isopropyl-4(2),6-dimethyldihydro-4H-1,3,5-dithiazine;
15.062		11605	541-58-2	2,4-Dimethylthiazole	
15.063	4035		4175-66-0	2,5-Dimethylthiazole	
15.064		11609	638-02-8	2,5-Dimethylthiophene	Thiazole, 2,5-dimethyl-
15.066	3831		505-29-3	1,4-Dithiane	p-Dithiane; 1,4-Dithiocyclohexane; 1,4-Dithiin, tetrahydro-; Diethylene disulfide;
15.068	4388		19961-52-5	5-Ethyl-2-methylthiazole	
15.072		11614	505-29-3	2-Ethylthiophene	
15.076	4137	11616	18794-77-9	2-Hexylthiophene	

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
15.078		11617	53498-32-1	2-Isobutyl-4,5-dimethylthiazole	4,5-Dimethyl-2-(2-methylpropyl)thiazole
15.079	3781		101517-87-7	2-Isobutyldihydro-4,6-dimethyl-1,3,5-dithiazine	2(4)-Isobutyl-4(2),6-dimethyldihydro- 4H-1,3,5-dithiazine; 2-(2- Methylpropyl)dihydro-4,6-dimethyl- 1,3,5-dithiazine
15.081		11619	292-46-6	Lenthionine	1,2,3,5,6-Pentathiacycloheptane
15.085		11622	13679-83-9	4-Methyl-2-propionylthiazole	
15.089		11626	3581-87-1	2-Methylthiazole	
15.091		11631	554-14-3	2-Methylthiophene	
15.092		11632	616-44-4	3-Methylthiophene	
15.096		11634	4861-58-9	sec-Pentylthiophene	1-Methylbutylthiophene
15.097		11635	13679-75-9	2-Propionylthiophene	2-Propanoylthiophene;
15.106		11647	110-02-1	Thiophene	
15.107		11874	98-03-3	Thiophene-2-carbaldehyde	2-Formylthiophene;
15.109	4018	11649	638-17-5	2,4,6-Trimethyldihydro-1,3,5(4H)-dithiazine	Thialdine;
15.113	4017		74595-94-1	2,4,6-Triisobutyl-5,6-dihydro-4H-1,3,5-dithiazine	



Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
16.001	2054	464	7563-33-9	Ammonium isovalerate	Isovaleric acid, ammonium salt; Ammonium 3-methylbutanoate; Butanoic acid, 3-methyl-, ammonium salt; Ammonium 3-methylbutanoate
16.002	2053	482	12135-76-1	Diammonium sulfide	Ammonium monosulfide;
16.006	2787	590	2444-46-4	N-Nonanoyl 4-hydroxy-3-methoxybenzylamide	Pelargonyl vanillylamide; N-(4-Hydroxy-3-methoxybenzyl)nonanamide; n-Nonanoyl vanillylamide;
16.007	3779	647	7783-06-4	Hydrogen sulfide	
16.009		739	7664-41-7	Ammonia	
16.012	2528	2221	1405-86-3	Glycyrrhizic acid	Glycyrrhizin;
16.013	3455	2298	39711-79-0	N-Ethyl-2-isopropyl-5-methylcyclohexane carboxamide	N-Ethyl-p-menthane-3-carboxamide;
16.015	2444	6002(2)/11949	77-83-8	Ethyl methylphenylglycidate	Ethyl alpha,beta-epoxy-beta-methylphenylpropionate; Strawberry aldehyde; Aldehyde C-16; Ethyl 2,3- epoxy-3-methyl-3-phenylbutanoate
16.016	2224	11741	58-08-2	Caffeine	1,3,7-trimethyl-2,6-dioxopurine
16.017	2446	11869	109-95-5	Ethyl nitrite	Nitrous ether;
16.018	2454	11844	121-39-1	Ethyl 3-phenyl-2,3- epoxypropionate	Ethyl alpha,beta-epoxy-alpha- phenylpropionate; Ethyl 3- phenylglycidate;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
16.027	3322	10493	67-03-8	Thiamine hydrochloride	Vitamin B1; 3-((4-amino-2-methyl-5-pyrimidinyl)methyl)-5-(2-hydroxyethyl)-4-methylthiazolium chloride
16.030	3578	11540	67715-80-4	2-Methyl-4-propyl-1,3-oxathiane	1,3-Oxathiane, 2-methyl-4-propyl;-;
16.032	3591		83-67-0	Theobromine	3,7-Dihydro-3,7-dimethyl-1h-purine-2,6-dione; 3,7-Dimethylxanthine; 1H-purine-2,6-dione, 3,7-dihydro-3,7-dimethyl; 3,7-Dihydro-3,7-dimethyl-1H-purine-2,6-dione
16.039	3752			Potassium 2-(1'-ethoxy)ethoxypropanoate	
16.040	3757	11707	74367-97-8	Ethyl 2,3-epoxy-3-methyl-3-p-tolylpropionate	Ethyl methyl-p-tolylglycidate; Ethyl methyl-p-methylphenylglycidate; Ethyl 2,3-epoxy-3-(4-methylphenyl)butanoate
16.041	3773		13794-15-5	Sodium 2-(4-methoxyphenoxy)propionate	
16.042	4084	10501	18383-49-8	Carvone-5,6-oxide	5,6-Epoxy-p-menth-8-en-2-one
16.043	4085	10500	1139-30-6	beta-Caryophyllene epoxide	beta-Caryophyllene oxide; 4,5-Epoxy-4,12,12-trimethyl-8-methylene-bicyclo[8.2.0]dodecane
16.044	4199	10508	35178-55-3	Piperitenone oxide	1,2-Epoxy-p-menth-4(8)-en-3-one

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
16.049	4252		541-35-5	Butyramide	Butyramide; Butanimidic acid; n- Butylamide
16.051	4109		38284-11-6	Epoxyoxophorone	7- Oxabicyclo[ 4.1.0] heptane- 2,5- dione, 1,3,3-trimethyl-; 3,5,5- Trimethyl- 2,3- epoxy cyclohexane- 1,4- dione
16.053	3804	10459	51115-67-4	2-Isopropyl- N,2,3- trimethylbutanamide	2-Isopropyl-N,2,3-trimethylbutyramide; N,2,3-trimethyl- 2- isopropylbutanamide;
16.055	3794		564-20-5	Sclareolide	Norambrienolide; Decahydro-tetramethylnaphtho-furanone; 3a,6,6,9a-Tetramethyldecahydronaphtho(2,1b) furan-1-one
16.056	3813		107-35-7	Taurine	2-Aminoethanesulfonic acid
16.058	2769	10286	10236-47-2	Naringin	
16.059	2053	482	12124-99-1	Ammonium hydrogen sulphide	
16.060	2528	2221	53956-04-0	Glycyrrhizic acid, ammoniated	
16.061	3811		20702-77-6	Neohesperidine dihydrochalcone	
16.071	4037		188590-62-7	4,5-Epoxydec-2(trans)-enal	
16.073	3900		126-96-5	Sodium diacetate	Sodium ethanoate;

<b>Ru No.<sup>1</sup></b>	<b>FEMA No.<sup>2</sup></b>	<b>EC No.<sup>3</sup></b>	<b>CAS</b>	<b>English Name</b>	<b>Synonyms; Systematic Name</b>
16.075	3801		122397-96-0	Ethyl vanillin beta-D- glucopyranoside	
16.080	3042	746	72401-53-7	Tannic acid	D-glucose pentakis[3,4-dihydroxy-5- [(trihydroxy-3,4,5- benzoyl)oxy]benzoate]
16.081	3038	11819	126-14-7	Sucrose octaacetate	Octaacetylsucrose; Octaacetyl sucrose;
17.001	3252		107-95-9	beta-Alanine	3-Aminopropanoic acid
17.002	3818	11729	56-41-7	l-Alanine	2-Aminopropanoic acid
17.003	3819	11890	74-79-3	l-Arginine	(S)-2-Amino-5-guanidinovaleric acid; Arginine; 2-Amino-5- guanidinovaleric acid;
17.005	3656	10078	56-84-8	Aspartic acid	2-Aminobutanedioic acid
17.006		11747	56-89-3	Cystine	
17.007	3684		56-85-9	Glutamine	
17.008	3694		71-00-1	l-Histidine	
17.010	3295	10127	443-79-8	d,l-Isoleucine	2-Amino-3-methylpentanoic acid

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
17.012	3297	10482	61-90-5	l-Leucine	
17.013	3847	11947	70-54-2	DL-Lysine	
17.014	3301	569	59-51-8	d,l-Methionine	D,L-Methionine; alpha-Amino- gamma-methyl thio-n-butyric acid; 2- Amino-4-(methy thio)-butanoic acid; 2-Amino-4-(methylthio)butanoic acid
17.015	3445	761	1115-84-0	S-Methylmethioninesulphonium chloride	Vitamin U; DL-(3-Amino-3-carboxypropyl)dimethylsulphonium chloride;
17.017	3726	10488	150-30-1	DL-Phenylalanine	
17.018	3585	10488	63-91-2	l-Phenylalanine	
17.019	3319	10490	147-85-3	l-Proline	Pyrrolidine-2-carboxylic acid
17.022	3736		60-18-4	l-Thyrosine	
17.023	3444		516-06-3	DL-Valine	2-Amino-3-methylbutanoic acid
17.024	3818	11729	302-72-7	DL-Alanine	L-alpha-Alanine; (S)-2- Aminopropanoic acid; L-alpha- Aminopropionic acid; DL-Alanine; DL-2-Aminopropanoic acid;
17.026	3847	11947	56-87-1	l-Lysine	Lysine; (S)-2,6-Diaminohexanoic acid; alpha, epsilon-Diaminocaproic acid;

Ru No. <sup>1</sup>	FEMA No. <sup>2</sup>	EC No. <sup>3</sup>	CAS	English Name	Synonyms; Systematic Name
17.027	3301		63-68-3	l-Methionine	
17.028	3444		72-18-4	l-Valine	
17.032		11746	52-89-1	l-Cysteine hydrochloride	
17.033	3263	10464	52-90-4	l-Cysteine	
17.034	3287	11771	56-40-6	Glycine	

Notes:

<sup>1</sup> - Ru No. – number of the federal executive body responsible for supervision and control in the sphere of sanitary and epidemiological well-being of population - Russian nomenclature of flavouring substances allowed for manufacturing of edible flavourings, which is based on the European database “FLAVIS”; after the Latin letters “Ru” the first two figures before the dot mean chemical compound classes, the next three figures after the dot mean the number of the substance in the specified compound class; compound classes: 01- hydrocarbons, 02 – alcohols, 03 – simple ethers, 04 – phenols and simple phenol ethers, 05 – aldehydes, 06 – acetaldehydes, 07 – ketones, 08 – organic acids, 09 – mixed ethers of organic acids, 10 – lactones, 11 – amines, 12 – sulfur compounds, 13 – oxygen containing heterocyclic compounds, 14 – nitrogen containing heterocyclic compounds, 15 – sulfur containing heterocyclic compounds, 16 – mixed class compounds.

<sup>2</sup> – FEMA No. – number in accordance with the FEMA-GRAS list – “Flavouring substances “generally recognized as safe” by the Flavor and Extracts Manufacturers Association (Raw material for flavourings and perfume – 2010, Allured Business Media, II, USA)

<sup>3</sup> - EC No. - number in accordance with the classification approved by the European Council as per the register of flavouring substances for food products adopted by the Regulation of the European Council and the Parliament No.2232/96 dated October 28, 1996 (Regulation (EC) of the European Parliament and of the Council of 28 October 1996) and by the Decision of the European Commission 1999/217/EC dated February 23, 1999 (Commission Decision 1999/217/EC of the 23 February 1999) as amended.

MAXIMUM PERMISSIBLE LEVELS OF CONTENT OF FOOD SUPPLEMENTS IN FOOD PRODUCTS DUE TO APPLICATION OF VEGETABLE RAW MATERIALS AND FLAVOURINGS PRODUCED FROM VEGETABLE RAW MATERIALS<sup>1</sup>

Food Supplements	Food Products	Maximum Permissible Level, mg/kg (l)
B-sasarone	Alcoholic beverages	1.0
Quassin <sup>3</sup>	Non-alcoholic beverages	0.5
	Bakery products	1
	Alcoholic beverages	1.5
Coumarin	Bakery items produced with the use of cinnamon (as stated at the label)	50
	Bakery products	15
	Cereal snacks, including muesli	20
	Desserts	5
Menthofuran	Confectionery products with mint (peppermint)	500
	Small confectionery products (with the weight of a unit of max. 1 g) with mint (peppermint) that contributes to their breath freshening properties	3,000
	Chewing gum	1,000
	Alcoholic beverages with mint (peppermint)	200
Methyl eugenol (4-allyl-1,2-dimethoxybenzole) <sup>2</sup>	Milk containing products	20
	Meat semi-manufactured products and meat products including poultry meat and game	15
	Fish semi-manufactured products and fish products	10
	Soups and sauces	60
	Snacks ready for consumption	20
	Non-alcoholic beverages	1
Pulegone	Confectionery products mint (peppermint)	250
	Small confectionery products (with the weight of a unit of max. 1 g) with mint (peppermint) that contributes to their breath freshening properties	2,000
	Chewing gum	350
	Non-alcoholic beverages with mint (peppermint)	20
	Alcoholic beverages with mint (peppermint)	100
Safrole (1-allyl-3,4-methylenedioxybenzole) <sup>2</sup>	Meat semi-manufactured products and meat products including poultry meat and game	15
	Fish semi-manufactured products and fish products	15
	Soups and sauces	25
	Non-alcoholic beverages	1
Hydrogen cyanide	Nougat, marzipan and their substitutes (analogues) and similar products	50
	Canned fruit with seeds	5
	Alcoholic beverages	35
Thujone ( $\alpha$ and $\beta$ )	Alcoholic beverages	10
	Alcoholic beverages produced with the use of	35

	wormwood	
	Non-alcoholic beverages produced with the use of wormwood	0.5
Teucrin A <sup>3</sup>	Bitter alcoholic beverages, including liqueurs with bitter taste	5
	Alcoholic beverages	2
Estragole (1-allyl-4-methoxybenzole) <sup>2</sup>	Milk containing products	50
	Processed fruit, vegetables (including mushrooms, roots, root crops, grain legumes and legumes), nuts and seeds	50
	Fish products	50
	Non-alcoholic beverages	10

Notes:

<sup>1</sup> - vegetable raw materials - fresh, dried or frozen herbs and spices;

<sup>2</sup> - only for food items produced with the use of flavourings produced from vegetable raw materials.

<sup>3</sup> - the scope of application shall be restricted only by the indicated food products.

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FOOD ADDITIVES FOR PRODUCTION OF BREASTMILK SUBSTITUTES FOR  
HEALTHY BABIES DURING THE FIRST YEAR OF THEIR LIFE<sup>1</sup>

Food Additive (Index E)	Maximal Level in Products Ready for Consumption
<b>Acids, acidity regulators<sup>2</sup></b>	
Citric acid (E330) Potassium citrate (E332), Sodium citrate (E331)- used separately or in combination, in terms of acid	2 g/l
L(+)-Lactic acid (E270) <sup>3</sup>	According to TD
Orthophosphoric acid (E338), Potassium phosphate (E340), Sodium phosphate (E339)- used separately or in combination as added phosphates, in terms of P <sub>2</sub> O <sub>5</sub>	1 g/l
<b>Antioxidants</b>	
L-Ascorbyl palmitate (E304),	10 mg/l
Tocopherol concentrate (E306), Alpha-tocopherol (E307), Gamma-tocopherol (E308), Delta-tocopherol (E309)- used separately or in combination	10 mg/l
<b>Emulsifiers<sup>4</sup></b>	
Lecithins (E322)	1 g/l
Mono- and diglycerides of fatty acids (E471)	4 g/l
Citric acid esters of mono- and diglycerides of fatty acids (E472c) for powdered infant formulas	7.5 g/l
for liquid infant formulas containing hydrolysate proteins, peptides or amino acids	9 g/l
Sucrose esters of fatty acids (E473)- for liquid infant formulas containing hydrolysate proteins, peptides or amino acids	120 mg/l
<b>Other food additives</b>	
Guar gum (E412) for products containing hydrolysate proteins	1 g/l
Nitrogen (E941) Argon (E938) Helium (E939) Carbon dioxide (E290)	According to TD
Flavourings - natural fruit extracts	According to TD

Notes:

<sup>1</sup> - It is allowed to use food additives for production of infant food within other products. The contents of Gum arabic (E414) in such products shall not exceed 150 g/kg, the maximal contents of Silicon dioxide amorphous (E551) makes up 10 g/kg. Mannitol (E421) as a bearer of vitamin B12 can be used in infant food, the contents of B12 shall not exceed 1 mg/kg of mannitol. Sodium ascorbate (E301) can be used in coverings of polyunsaturated fatty acids. The amount

arising from other products shall not exceed 10 mg/kg for Gum arabic (E414) and 75 mg/kg for Sodium ascorbate (E301) in a product ready for consumption.

Starch sodium octenyl succinate (E1450) can be used in vitamin preparations and polyunsaturated fatty acids, however, its amount shall not exceed: for vitamin preparations - 100mg/kg of the product ready for consumption, for polyunsaturated fatty acids - 1 g/kg of the product ready for consumption.

<sup>2</sup> - If such food additives as Potassium citrates (E332), Sodium citrates (E331), Potassium phosphates (E340) and Sodium phosphates (E339), building up physiologically active ions of mineral substances, are used in production of infant milk food based on cow's milk proteins, the total amount of such mineral substances in terms of 100 kcal of the product ready for consumption (according to the instruction) shall make up: 20-60 mg for Sodium, 60-145 mg of Potassium and 25-90 mg of Phosphorus.

<sup>3</sup> - L(+)-Lactic acid (E 270) received from nonpathogenic and nontoxigenic strains of microorganisms can be used for the production of fermented milk food.

<sup>4</sup> - If more than one of the following substances are used in production of a food product: lecithin (E322), mono- and diglycerides of fatty acids (E471), citric acid esters of mono- and diglycerides of fatty acids (E472c), sucrose esters of fatty acids (E473), their maximum value specified for such products shall be respectively decreased, that is their total value (in % from the maximum levels of separate emulsifiers) shall not exceed 100 %.

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FOOD ADDITIVES FOR PRODUCTION OF INFANT FORMULAS FOR HEALTHY  
BABIES OLDER THAN FIVE MONTHS<sup>1</sup>

Index Food Additive (E)	Maximal Level Products Ready for Consumption
<b>Acids, acidity regulators<sup>2</sup></b>	
Citric acid (E330) Potassium citrate (E332), Sodium citrate (E331)- used separately or in combination, in terms of acid	2 g/l
L(+)-Lactic acid (E270) <sup>3</sup>	According to TD
Orthophosphoric acid (E338), Potassium phosphate (E340), Sodium phosphate (E339)- used separately or in combination as added phosphates, in terms of P <sub>2</sub> O <sub>5</sub>	1 g/l
<b>Antioxidants</b>	
L-Ascorbyl palmitate (E304),	10 mg/l
Tocopherol concentrate (E306), Alpha-tocopherol (E307), Gamma-tocopherol (E308), Delta-tocopherol (E309)- used separately or in combination	10 mg/l
<b>Emulsifiers<sup>4</sup></b>	
Lecithins (E322)	1 g/l
Mono- and diglycerides of fatty acids (E471)	4 g/l
Esters of citric acid and mono- and diglycerides of fatty acids (E472c) for powdered infant formula for liquid infant formulas containing hydrolysate proteins, peptides or amino acids	7.5 g/l 9 g/l
Sucrose esters of fatty acids (E473)- for products containing hydrolysate proteins, peptides or amino acids	120 mg/l
<b>Stabilizers<sup>5</sup></b>	
Guar gum (E412)	1 g/l
Carob gum (E410)	1 g/l
Carrageenan (E407)	0.3 g/l
Pectins (E440) for fermented infant complementary feeding products	5 g/l
<b>Flavourings</b>	
Natural flavourings	According to TD
Vanillin Ethylvanillin for products on cereal or fruit basis	50 mg/kg
Vanilla extract for products on cereal or fruit basis	According to TD
Nitrogen (E941) Argon (E938)	According to TD

Notes:

<sup>1</sup> - It is allowed to use food additives for production of infant food within other products. The contents of Gum arabic (E414) in such products shall not exceed 150 g/kg, the maximal contents of Silicon dioxide amorphous (E551) makes up 10 g/kg. Mannitol (E421) as a bearer vitamin B12 can be used in infant food, the contents of B12 shall not exceed 1 mg/kg of mannitol. Sodium ascorbate (E301) can be used in coverings of polyunsaturated fatty acids. The amount arising from other products shall not exceed 10 mg/kg for Gum arabic (E414) and 75 mg/kg for Sodium ascorbate (E301) in a product ready for consumption.

Starch sodium octenyl succinate (E1450) can be used in vitamin preparations and polyunsaturated fatty acids, however, its amount shall not exceed: for vitamin preparations - 100mg/kg of the product ready for consumption, for polyunsaturated fatty acids - 1 g/kg of the product ready for consumption.

<sup>2</sup> - If such food additives as Potassium citrates (E332), Sodium citrates (E331), Potassium phosphates (E340) and Sodium phosphates (E339), building up physiologically active ions of mineral substances, are used in production of infant milk food based on cow's milk proteins, the total amount of such mineral substances in terms of 100 kcal of the product ready for consumption (according to the instruction) shall make up: 20-60 mg for Sodium, 60-145 mg of Potassium and 25-90 mg of Phosphorus.

<sup>3</sup> - L(+)-Lactic acid (E 270) received from nonpathogenic and nontoxigenic strains of microorganisms can be used for the production of fermented milk food.

<sup>4</sup> - If more than one of the following substances are used in production of a food product: lecithin (E322), mono- and diglycerides of fatty acids (E471), citric acid esters of mono- and diglycerides of fatty acids (E472c), sucrose esters of fatty acids (E473), their maximum value specified for such products shall be respectively decreased, that is their total value (in % from the maximum levels of separate emulsifiers) shall not exceed 100 %.

<sup>5</sup> - If more than one of the following substances are used in production of a food product: Carrageenan (E407), Carob gum (E410) and Guar gum (E412), their maximum value specified for such products shall be respectively decreased, that is their total value (in % from the maximum levels of separate stabilizers) shall not exceed 100 %.

FOOD ADDITIVES FOR PRODUCTION OF INFANT COMPLEMENTARY FEEDING  
PRODUCTS FOR HEALTHY BABIES DURING THE FIRST YEAR OF THEIR LIFE AND  
OF BABY FOOD FOR CHILDREN AGED 1-3<sup>1</sup>

Food Additive	Product	Maximal level in Products Ready for Consumption
Potassium hydroxide (E525), Calcium hydroxide (E526), Sodium hydroxide (E524)- for pH regulation only	Complementary feeding products	According to TD
L-Cysteine and its hydrochlorides - Sodium and Potassium salts (E920)	Cracker	1 g/kg
Ammonium carbonates (E503), Potassium carbonates (E501), Sodium carbonates (E500)- as leavening agent only	Complementary feeding products	According to TD
Calcium carbonate (E170)- for pH regulation only	Complementary feeding products	According to TD
Citric acid (E330) Potassium citrates (E332), Calcium citrates (E333), Sodium citrates (E331)- used separately or in combination, for pH regulation only	Complementary feeding products	According to TD
	Fruit-based products with low sugar content (E333 only)	According to TD
Lactic acid (E 270), Potassium lactate (E326), Calcium lactate (E327), Sodium lactate (E325)- used separately or in combination, for pH regulation only <sup>2,3</sup>	Complementary feeding products	According to TD
Hydrochloric acid (E507)	Complementary feeding products	According to TD
Acetic acid (E260), Potassium acetate (E261), Calcium acetate (E263), Sodium acetate (E262)- used separately or in combination, for pH regulation only	Complementary feeding products	According to TD
Malic acid (E296)- for pH regulation only <sup>2</sup>	Complementary feeding products	According to TD
Orthophosphoric acid (E338)- as added phosphate in terms of P <sub>2</sub> O <sub>5</sub> , for pH regulation only	Complementary feeding products	1 g/kg
Potassium phosphates (E340), Calcium phosphates (E341), Sodium phosphates (E339)- used separately or in combination, as added phosphate in terms of P <sub>2</sub> O <sub>5</sub>	Cereal-based products	1 g/kg
	Fruit-based desserts (E341iii only)	1 g/kg
Disodium diphosphate	Sponge cakes and rusks	500 mg/kg

(E450i)		residues
L-Ascorbic acid (E300), L-Calcium ascorbate (E302), L-Sodium ascorbate (E301)- used separately or in combination, in terms of ascorbic acid	Fruit and vegetable-based juices, beverages; Cereal-based products containing fat, including sponge cakes and rusks	300 mg/kg 200 mg/kg
L-ascorbyl palmitate (E304), Tocopherol concentrate (E306), Alpha-tocopherol (E307), Gamma- tocopherol (E308), Delta-tocopherol (E309)- used separately or in combination	Cereal-based products containing fat, including sponge cakes and rusks	100 mg/kg
Lecithins (E322)	Sponge cakes and rusks; cereal- based products	10 g/kg
Mono- and diglycerides of fatty acids (E471), Citric acid esters of mono- and diglycerides of fatty acids (E472c), Lactic acid esters of mono- and diglycerides of fatty acids (E472b), Acetic acid esters of mono- and diglycerides of fatty acids (E472a)- used separately or in combination	Sponge cakes and rusks; cereal- based products	5 g/kg
Alginic acid (E400), Potassium alginate (E402), Calcium alginate (E404), Sodium alginate (E401)- used separately or in combination	Desserts, puddings	500 mg/kg
Guar gum (E412), Gum arabic (E414) Carob gum (E410) Xanthan gum (E415), Pectins (E440)- used separately or in combination	Complementary feeding products Cereal-based gluten-free products	10 g/kg 20 g/kg
Silicon dioxide amorphous (E551)	Dry cereal-based products	2 g/kg
Tartaric acid (E334), Potassium tartrate (E336), Calcium tartrate (E334), Sodium tartrate (E335)- used separately or in combination <sup>2</sup>	Sponge cakes and rusks	500 mg/kg residues
Glucono delta-lactone (E575)	Sponge cakes and rusks	500 mg/kg residues
Modified starches: acetylated distarch adipate (E1422), acetylated distarch phosphate (E1414), acetylated starch (E1420), acetylated oxidised starch (E1451), distarch phosphate (E1412), monostarch phosphate (E1410), oxidized starch (E1404), phosphated distarch phosphate (E1413), starch sodium octenyl succinate (E1450)- used separately or in combination	Complementary feeding products	50 g/kg

Nitrogen (E941) Argon (E938) Helium (E939) Carbon dioxide (E290)	Complementary feeding products	According to TD
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Notes:

<sup>1</sup> - It is allowed to use food additives for production of infant food within other products. The contents of Gum arabic (E414) in such products shall not exceed 150 g/kg, the maximal contents of Silicon dioxide amorphous (E551) makes up 10 g/kg. Mannitol (E421) as a bearer vitamin B12 can be used in infant food, the contents of B12 shall not exceed 1 mg/kg of mannitol. Sodium ascorbate (E301) can be used in coverings of polyunsaturated fatty acids. The amount arising from other products shall not exceed 10 mg/kg for Gum arabic (E414) and 75 mg/kg for Sodium ascorbate (E301) in a product ready for consumption.

Starch sodium octenyl succinate (E1450) can be used in vitamin preparations and polyunsaturated fatty acids, however, its amount shall not exceed: for vitamin preparations - 100mg/kg of the product ready for consumption, for polyunsaturated fatty acids - 1 g/kg of the product ready for consumption.

<sup>2</sup> - Only L(+)- forms of lactic acid (E270), tartaric acid (E334), malic acid (E296) and their salts can be used in production of complementary feeding.

<sup>3</sup> - L(+)-Lactic acid (E 270) received from nonpathogenic and nontoxigenic strains of microorganisms can be used for the production of fermented milk food.

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FOOD ADDITIVES FOR PRODUCTION OF SPECIAL DIETARY PRODUCTS FOR  
CHILDREN UNDER THREE YEARS<sup>1,2</sup>

Food Additive	Product	Maximal level in Products Ready for Consumption
Sodium alginate (E401)	Special products with the contents adopted for nutrition of children with metabolic disorder and enteral nutrition of babies older than 4 months	1 g/l
Citric acid esters of mono- and diglycerides of fatty acids (E472c),	Powdered dietetic infant formula for babies aged 0 months+	7.5 g/l
	Liquid dietetic infant formula for babies aged 0 months+	9 g/l
Guar gum (E412)	Products and liquid formulas containing hydrolysate proteins, peptides or amino acids for babies aged 0 months+	10 g/l
Carob gum (E410)	Products decreasing gastroesophageal reflux for babies aged 0 months+	10 g/l
Sodium Carboxymethyl cellulose (E466)	Products for dietetic correction of metabolic disorder for babies aged 0 months+	10 g/l
Starch sodium octenyl succinate (E1450)	Infant formula	20 g/l
Xanthan gum (E415)	Peptide- or amino acid-based products can be used for nutrition of babies aged 0 months+ with gut disorder, problems with protein absorption and for dietetic correction of metabolic disorder of babies aged 0 months+	1.2 g/l
Mono- and diglycerides of fatty acids (E471)	Products with low protein contents for babies aged 0 months+	5 g/l
Pectins (E440)	Products for babies with gut disorder	10 g/l
Propylene glycol alginate (E405)	Special products for babies aged 12 months+ with cow's milk intolerance and dietetic correction of inborn metabolic disorder	200 mg/l
Sucrose esters of fatty acids (E473)	Products containing hydrolysate proteins, peptides or amino acids	120 mg/l
Nitrogen (E941) Argon (E938) Helium (E939) Carbon dioxide (E290)	Dietary products	According to TD

Notes:

<sup>1</sup> - It is allowed to use food additives for production of infant food within other products. The contents of Gum arabic (E414) in such products shall not exceed 150 g/kg, the maximal contents of Silicon dioxide amorphous (E551) makes up 10 g/kg. Mannitol (E421) as a bearer vitamin B12 can be used in infant food, the contents of B12 shall not exceed 1 mg/kg of mannitol. Sodium ascorbate (E301) can be used in coverings of polyunsaturated fatty acids. The amount arising from other products shall not exceed 10 mg/kg for Gum arabic (E414) and 75 mg/kg for Sodium ascorbate (E301) in a product ready for consumption.



Starch sodium octenyl succinate (E1450) can be used in vitamin preparations and polyunsaturated fatty acids, however, its amount shall not exceed: for vitamin preparations - 100mg/kg of the product ready for consumption, for polyunsaturated fatty acids - 1 g/kg of the product ready for consumption (Section 4.4).

<sup>2</sup> - Food additives specified in Annexes No. 21, No. 22 and No. 23 can also be used in production of special dietary products for children under three years.

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