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⁽¹⁾ Text with EEA relevance

EN

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

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II

(Non-legislative acts)

REGULATIONS

COMMISSION IMPLEMENTING REGULATION (EU) No 872/2012

of 1 October 2012

adopting the list of flavouring substances provided for by Regulation (EC) No 2232/96 of the European Parliament and of the Council, introducing it in Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council and repealing Commission Regulation (EC) No 1565/2000 and Commission Decision 1999/217/EC

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

substances notified by the Member States and on the basis of a specific evaluation programme.

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs⁽¹⁾, and in particular Articles 3(2) and 4(1) and Article 5 thereof,

Having regard to Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC⁽²⁾, and in particular Article 25(1) thereof,

Whereas:

- (1) Regulation (EC) No 2232/96 provides for a Community procedure for evaluation and authorisation of flavouring substances. The Member States notified to the Commission the list of flavouring substances which may be used in or on foods marketed on their territory.
- (2) Regulation (EC) No 2232/96 provides for a list of flavouring substances that are authorised to the exclusion of all others. That list is to be established on the basis of a register containing the flavouring

- (3) The notified substances were entered in a register laid down by Commission Decision 1999/217/EC of 23 February 1999 adopting a register of flavouring substances used in or on foodstuffs drawn up in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽³⁾.

- (4) Commission Regulation (EC) No 1565/2000⁽⁴⁾ has laid down the measures necessary for the adoption of an evaluation programme in application of Regulation (EC) No 2232/96. Pursuant to Article 5(2) of Regulation (EC) No 2232/96, flavouring substances not included in the register have also been included in the evaluation programme.

- (5) The European Food Safety Authority (hereinafter referred to as 'the Authority') evaluated a number of flavouring substances⁽⁵⁾ through a stepwise approach that integrates information on structure-activity relationships, intake from current uses, toxicological threshold of concern, and available data on metabolism and toxicity. Those flavouring substances which do not give rise to safety concerns at their levels of dietary intakes should be included in the list referred to in Regulation (EC) No 2232/96.

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

⁽²⁾ OJ L 354, 31.12.2008, p. 34.

⁽³⁾ OJ L 84, 27.3.1999, p. 1.

⁽⁴⁾ OJ L 180, 19.7.2000, p. 8.

⁽⁵⁾ <http://www.efsa.europa.eu/>

- (6) Pursuant to Article 2(1) of Regulation (EC) No 1565/2000, substances that are contained in the register and have already been classified by the Scientific Committee on Food (hereinafter referred to as 'SCF') in Category 1 ⁽⁶⁾ or by the Council of Europe in Category A ⁽⁷⁾ or by Joint FAO/WHO Expert Committee on Food Additives (hereinafter referred to as 'JECFA'), so as to present no safety concern, as laid down in the reports of its 46th, 49th, 51st and 53rd meeting ⁽⁸⁾, need not be re-evaluated within the evaluation programme. These substances should be included in the list referred to in Regulation (EC) No 2232/96.
- (7) Pursuant to Article 2(2) of Regulation (EC) No 1565/2000, substances contained in the register and classified by JECFA, since 2000, so as to present no safety concern on the basis of the default approach for estimation of intake, have to be considered by the Authority. Those substances, for which the Authority agreed with the JECFA conclusion, should be included in the list referred to in Regulation (EC) No 2232/96.
- (8) Flavouring substances may be used in or on foods in accordance with the good manufacturing practices or, if necessary, with specific conditions. The list referred to in Regulation (EC) No 2232/96 should contain information on the unique identification number of the substance (FL-No), the name of the substance (Chemical name), the Chemical Abstracts Service registry number, the JECFA number, the Council of Europe number, the purity, the specific conditions of use and reference to the scientific body that has carried or is carrying out the evaluation.
- (9) For the purpose of this Regulation, the food categories as laid down in Annex II to Regulation (EC) No 1333/2008 of the European Parliament and of the Council of 16 December 2008 on food additives ⁽⁹⁾, should be referred to. When necessary, interpretation decisions can be adopted in accordance with Article 13(c) of Regulation (EC) No 1334/2008 in order to clarify whether or not a particular food belongs to a certain category of food.
- (10) Flavouring substances which did not receive a favourable assessment on their safety have been listed in Part A of Annex III to Regulation (EC) No 1334/2008 concerning substances which shall not be added as such to food or have been deleted from the register by Commission Decisions 2005/389/EC ⁽¹⁰⁾, 2006/252/EC ⁽¹¹⁾ and 2008/478/EC ⁽¹²⁾.
- (11) Flavouring substances for which the requested information has not been provided and which, therefore, have not been evaluated by the Authority in accordance with Article 3(5) of Regulation (EC) No 1565/2000, should not be included in the list referred to in Regulation (EC) No 2232/96.
- (12) Flavouring substances for which the persons responsible for placing them on the market have withdrawn the application should not be included in the list referred to in Regulation (EC) No 2232/96.
- (13) For a number of substances, the Authority has not completed the evaluation or it has requested additional scientific data to be provided for completion of the evaluation. In accordance with the objectives of Regulations (EC) No 2232/96 and (EC) No 1334/2008 and in order to enhance legal certainty it is appropriate to include those substances in the list referred to in Regulation (EC) No 2232/96 to allow those substances which are currently placed on the market, to continue to be used in or on foods until risk assessment and authorisation procedures have been concluded.
- (14) To manage the submissions of additional scientific data requested by the Authority, time limits should be set for the persons responsible for placing flavouring substances on the market so as to comply with the Authority's requests as expressed in the published opinions. Therefore, footnotes 2 to 4 have been assigned for those substances for which the Authority has requested additional scientific data in the list referred to in Regulation (EC) No 2232/96. A time limit should be set for the Authority to evaluate the submitted data. Where the necessary information is not provided by the time requested the flavouring substance in question may not be evaluated in accordance with Article 3(5) of Regulation (EC) No 1565/2000 and therefore will be withdrawn from the Union list in accordance with the procedure laid down in Article 7 of Regulation (EC) No 1331/2008 of the European Parliament and of the Council ⁽¹³⁾.

⁽⁶⁾ Annex 6 to the minutes of the 98th meeting of the Scientific Committee on Food, 21 and 22 September 1995.

⁽⁷⁾ Flavouring substances and natural sources of flavourings, Volume I, *Chemically-defined flavouring substances*, Fourth Edition. Council of Europe, *Partial agreement in the social and public health field*, Strasbourg, 1992, including its subsequent loose-leaf modifications until year 1999.

⁽⁸⁾ Evaluation of certain food additives and contaminants. 46th Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series No. 868, 1997.

49th Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series No. 884, 1999.

51st Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series, No. 891, 2000.

53rd Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series, No. 896, 2000.

⁽⁹⁾ OJ L 354, 31.12.2008, p. 16.

⁽¹⁰⁾ OJ L 128, 21.5.2005, p. 73.

⁽¹¹⁾ OJ L 91, 29.3.2006, p. 48.

⁽¹²⁾ OJ L 163, 24.6.2008, p. 42.

⁽¹³⁾ OJ L 354, 31.12.2008, p. 1.

- (15) Flavouring substances for which the Authority has not yet completed the evaluation and no request for additional information is pending, should be identified as such by footnote 1 in the list referred to in Regulation (EC) No 2232/96.
- (16) If the authorised flavouring substance is a racemate (an equal mixture of optical isomers), both the R- and S-form should also be authorised for use. If only the R-form is authorised then the S-form should not be covered by that authorisation and vice versa.
- (17) Several D- and D,L-amino acids have been evaluated as safe by the Authority for use as flavouring substances, provided that the substances are in an unchanged form when they are consumed. Therefore, the amino acids should be included in the list referred to in Regulation (EC) No 2232/96 concerning their use as flavouring substances only.
- (18) The list referred to in Regulation (EC) No 2232/96 is intended only to regulate the use of flavouring substances which are added to food in order to impart or modify odour and/or taste. Certain substances on the list may be also added to food for other purposes than flavouring and such uses remain subject to other rules. For some substances it is necessary to lay down a use level which refers to their use as a flavouring substance. These substances are caffeine (FL 16.016), theobromine (FL 16.032), neohesperidin dihydrochalcone (FL 16.061) and rebaudioside A (FL 16.113). For ammonium chloride (FL 16.048) national provisions are already in place. Therefore, for ensuring the functioning of the internal market the use levels should be harmonised.
- (19) The Authority has recommended, in its opinion adopted on 22 May 2008 ⁽¹⁴⁾, that for d-camphor (FL 07.215) a maximum use level should be set to ensure that exposure to d-camphor does not exceed 2 mg/kg body weight on a single day in any age group. Therefore, specific conditions of use should be set for d-camphor.
- (20) SCF concluded in its opinion adopted on 19 February 1988 ⁽¹⁵⁾, that it saw no objection from a toxicological point of view to the continued use at present levels (up to max 100 mg/l) of quinine in bitter drinks. The Authority does not contest this evaluation but recommends that the toxicological database on quinine should be reconsidered ⁽¹⁶⁾. Pending the re-evaluation of quinine, the use of three quinine salts (FL 14.011, FL 14.152 and FL 14.155) should be restricted to non-alcoholic and alcoholic drinks.
- (21) The Authority considered glycyrrhizic acid and its ammoniated form in the opinion adopted on 22 May 2008 ⁽¹⁷⁾. The Authority agreed with the evaluation by the SCF ⁽¹⁸⁾, which considered that the intake up to 100 mg/person/day would not give rise to safety concerns. Therefore, specific conditions of use should be set for glycyrrhizic acid (FL 16.012) and its ammoniated form (FL 16.060) as flavouring substances.
- (22) Regulation (EC) No 1334/2008 repeals Regulation (EC) No 2232/96 from the date of application of the list referred to in Article 2(2) of that Regulation. It is therefore appropriate, for reasons of legal certainty, to fix the date of application of that list. The principle of mutual recognition laid down in Regulation (EC) No 2232/96 should however continue to apply to flavouring substances included in the Annex to this Regulation for which footnotes 1 to 4 have been assigned. Regulation (EC) No 2232/96 will cease to apply and will become obsolete once the risk assessment and authorisation procedures for those flavouring substances have been concluded.
- (23) The evaluation programme provided for by Regulation (EC) No 1565/2000 was intended for the establishment of the list referred to in Article 2(2) of Regulation (EC) No 2232/96. With the establishment of that list Regulation (EC) No 1565/2000 becomes obsolete and should be repealed. It should however continue to apply to flavouring substances included in the Annex to this Regulation for which footnotes 1 to 4 have been assigned. Regulation (EC) No 1565/2000 will cease to apply and will become obsolete once the risk assessment and authorisation procedures for those flavouring substances have been concluded.
- (24) The register of flavouring substances used in or on foods adopted by Decision 1999/217/EC has become obsolete with the establishment of the list referred to in Article 2(2) of Regulation (EC) No 2232/96 and should be repealed.

⁽¹⁴⁾ Scientific opinion of the Panel on Food Additives, Flavourings, Processing Aids and Materials in contact with Food (AFC) on a request from the Commission on Camphor in flavourings and other food ingredients with flavouring properties. The EFSA Journal 729, 1-15.

⁽¹⁵⁾ Report of the Scientific Committee for Food on Quinine (opinion expressed on 19 February 1988). In Food - Science and techniques. Reports of the Scientific Committee for Food twenty-first series. Internal Market and Industrial Affairs Directorate-General.

⁽¹⁶⁾ Scientific Opinion of the Panel on Food Additives, Flavourings, Processing Aids and Materials in Contact with Food on a request from Commission on Flavouring Group Evaluation 35 (FGE.35). Three quinine salts from the Priority list from chemical group 30. The EFSA Journal (2008) 739, 1-18.

⁽¹⁷⁾ Scientific Opinion of the Panel on Food Additives, Flavourings, Processing Aids and Materials in Contact with Food (AFC) on a request from the Commission on Flavouring Group Evaluation 36 (FGE.36). Two triterpene glycosides from the priority list. The EFSA Journal (2008) 740, 1-19.

⁽¹⁸⁾ Opinion of the Scientific Committee on Food on glycyrrhizic acid and its ammonium salt (expressed on 4 April 2003). Scientific Committee on Food. SCF/CS/ADD/EDUL/225 Final. 10 April 2003. European Commission, Health & consumer Protection Directorate-General.

- (25) Regulation (EC) No 1334/2008 provides that the Union list of flavourings and source materials shall be established by introducing the list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 into Annex I to Regulation (EC) No 1334/2008 at the time of its adoption. The list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 should be introduced into Annex I to Regulation (EC) No 1334/2008 accordingly.
- (26) The Union list of flavourings and source materials is to apply without prejudice to other provisions laid down in sector specific legislation.
- (27) The use of flavourings and source materials in infant formulae, follow-on formulae, processed cereal-based foods and baby foods and dietary foods for special medical purposes intended for infants and young children as referred to in Directive 2009/39/EC of the European Parliament and of the Council of 6 May 2009 on foodstuffs intended for particular nutritional uses ⁽¹⁹⁾ will be harmonised in the future in the framework of specific rules to be adopted on the composition of foodstuffs intended for infants and young children. Meanwhile, the Member States should be able to apply national provisions in this matter stricter than the ones provided for in the list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96.
- (28) Pursuant to Regulation (EC) No 1334/2008 flavouring substances not included in the Union list may be placed on the market as such and used in or on food until 18 months after the date of application of the Union list. Since flavouring substances are already on the market in the Member States, provisions have been made to ensure that the transition to a Union authorisation procedure is smooth. To this effect transitional periods have been laid down for food containing those flavouring substances in Commission Regulation (EU) No 873/2012 ⁽²⁰⁾.
- (29) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Food Chain and Animal Health,
- (a) 'Union list' means the list of flavourings and source materials set out in Annex I to Regulation (EC) No 1334/2008;
- (b) 'evaluated flavouring substances' means substances for which the evaluation and approval have been completed at Union level. Those substances are assigned no footnotes in Part A of the Union list of flavourings and source materials;
- (c) 'flavouring substances under evaluation' means substances for which the risk assessment at Union level has not been completed at the time of entry into force of this Regulation. Those substances are assigned footnotes 1 to 4 in Part A of the Union list of flavourings and source materials.

Article 2

Adoption of the list of flavouring substances referred to in Regulation (EC) No 2232/96

The list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 is hereby adopted as set out in Part A of the Annex to this Regulation.

Article 3

Introduction of the list of flavouring substances into Regulation (EC) No 1334/2008

The text in the Annex to this Regulation is introduced into Annex I to Regulation (EC) No 1334/2008.

Article 4

Flavouring substances under evaluation

Flavouring substances under evaluation may be placed on the market and used in or on foods pending their inclusion as evaluated flavouring substances in Part A of the Union list or their removal from that list.

Article 5

Updating the list

Where necessary, Part A of the Union list shall be updated in accordance with the procedure referred to in Article 7 of Regulation (EC) No 1331/2008 as from the date of entry into force of this Regulation.

HAS ADOPTED THIS REGULATION:

Article 1

Definitions

For the purposes of this Regulation the following definitions shall apply:

⁽¹⁹⁾ OJ L 124, 20.5.2009, p. 21.

⁽²⁰⁾ See page 162 of this Official Journal.

*Article 6***Repeal of Regulation (EC) No 2232/96**

1. For the purposes of Article 24(2) of Regulation (EC) No 1334/2008, concerning the repeal of Regulation (EC) No 2232/96, the date of application of the list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 shall be 22 April 2013.

2. However, Articles 1 and 2, Article 3(1) and (2), and Article 4(1) and (2) of Regulation (EC) No 2232/96 and the Annex thereto shall continue to apply to flavouring substances under evaluation pending their inclusion as evaluated substances in Part A of the Union list or their removal from that list. References made in those Articles to the Register of flavouring substances shall be construed as references to Part A of the Union list.

*Article 7***Repeal of Regulation (EC) No 1565/2000**

Regulation (EC) No 1565/2000 is hereby repealed with effect from 22 April 2013. However it shall continue to apply to flavouring substances under evaluation.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 1 October 2012.

*Article 8***Repeal of Decision 1999/217/EC**

Decision 1999/217/EC is repealed with effect from 22 April 2013.

*Article 9***Provisions for foods for infants and young children**

Member States may apply national provisions which are more restrictive than Part A of the Union list as regards the use of flavouring substances in infant formulae, follow-on formulae, processed cereal-based foods and baby foods and dietary foods for special medical purposes intended for infants and young children as referred to in Directive 2009/39/EC. Those national measures must be essential to ensure that consumers are adequately protected and must be proportionate to the attainment of that objective.

*Article 10***Entry into force**

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 22 April 2013.

For the Commission
The President
José Manuel BARROSO

ANNEX

UNION LIST OF FLAVOURINGS AND SOURCE MATERIALS

PART A

Union list of flavouring substances

SECTION 1

Content of the list

Table 1 contains the following information:

Column 1 (FL No.): the unique identification number of the substance

Column 2 (Chemical Name): the name of the substance

Column 3 (CAS No.): the Chemical Abstracts Service (CAS) registry number

Column 4 (JECFA No.): The Joint FAO/WHO Expert Committee on Food additives (JECFA) number

Column 5 (CoE No.): The Council of Europe (CoE) number

Column 6 (Purity of the named substance at least 95% unless otherwise specified): The purity of the named flavouring substance has to be at least 95%. If less, the composition of the flavouring substances is given in this column.

Column 7 (Restrictions of Use): The use of flavouring substances is permitted in accordance with good manufacturing practices unless specific restriction is given in this column. Flavouring substances with restrictions of use may only be added to the listed food categories and under the specified conditions of use. For the purpose of the restrictions the following food categories, as laid down in Annex II of Regulation (EC) No 1333/2008, shall be referred to:

| Category number | Food category |
|-----------------|---|
| 1 | Dairy products and analogues |
| 2 | Fats and oils and fat and oil emulsions |
| 3 | Edible ices |
| 4.2 | Processed fruit and vegetables |
| 5 | Confectionery |
| 5.3 | Chewing gum |
| 6 | Cereals and cereal products |
| 7 | Bakery wares |
| 8 | Meat |
| 9 | Fish and fisheries products |
| 10 | Eggs and egg products |
| 11 | Sugars, syrups, honey and table-top sweeteners |
| 12 | Salts, spices, soups, sauces, salads and protein products |
| 13 | Food intended for particular nutritional uses as defined by Directive 2009/39/EC ⁽¹⁾ |

| Category number | Food category |
|-----------------|--|
| 14.1 | Non-alcoholic beverages |
| 14.2 | Alcoholic beverages, including alcohol-free and low-alcoholic counterparts |
| 15 | Ready-to-eat savouries and snacks |
| 16 | Desserts excluding products covered in category 1, 3 and 4 |
| 17 | Food supplements as defined in Directive 2002/46/EC ^(?) of the European Parliament and of the Council excluding food supplements for infants and young children |
| 18 | Processed food not covered by categories 1-17, excluding foods for infants and young children |

⁽¹⁾ OJ L 124, 20.5.2009, p. 21.

⁽²⁾ OJ L 183, 12.7.2002, p. 51.

Column 8 (Footnotes): The footnote '1' is allocated to the flavouring substances for which the evaluation has to be completed by the Authority. The footnotes '2' to '4' refer to time limits set for the applicants to comply with the Authority's requests as expressed in the published opinions. Where the necessary information is not provided by the time requested, the flavouring substance in question will be withdrawn from the Union list. The Authority shall evaluate the submitted data within 9 months from the receipt of such data. Substances which have already been evaluated by JECFA can be recognised from the JECFA number listed in column 4.

⁽¹⁾ evaluation to be completed by the Authority

⁽²⁾ additional scientific data shall be submitted by 31 December 2012

⁽³⁾ additional scientific data shall be submitted by 30 June 2013

⁽⁴⁾ additional scientific data shall be submitted by 31 December 2013

Column 9 (Reference): Reference to the scientific body that has carried out the evaluation.

SECTION 2

Notes

Note 1: Ammonium, sodium, potassium and calcium salts as well as chlorides, carbonates and sulphates are covered by the generic substances, providing that they have flavouring properties.

Note 2: If the authorised flavouring substance is a racemate (an equal mixture of optical isomers), both the R- and S- form shall also be authorised for use. If only the R-form has been authorised then the S-form is not covered by this authorisation and vice versa.

Note 3: Maximum levels refer to levels in or on food as marketed. By way of derogation from that principle, for dried and/or concentrated foods which need to be reconstituted the maximum levels shall apply to the food as reconstituted according to the instructions in the labelling taking into account the minimum dilution factor.

Note 4: The presence of a flavouring substance shall be permitted:

- (a) in a compound food other than as referred to in the Annex, where the flavouring substance is permitted in one of the ingredients of the compound food;
- (b) in a food which is to be used solely in the preparation of a compound food and provided that the compound food complies with this Regulation.

Table 1

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------|-----------|-----------|---------|--|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 01.001 | Limonene | 138-86-3 | | 491 | | | | EFSA |
| 01.002 | 1-Isopropyl-4-methylbenzene | 99-87-6 | 1325 | 620 | | | | EFSA |
| 01.003 | Pin-2(10)-ene | 127-91-3 | 1330 | 2114 | | | 2 | EFSA |
| 01.004 | Pin-2(3)-ene | 80-56-8 | 1329 | 2113 | | | 2 | EFSA |
| 01.005 | Terpinolene | 586-62-9 | 1331 | 2115 | | | | EFSA |
| 01.006 | alpha-Phellandrene | 99-83-2 | 1328 | 2117 | At least 85%; secondary components 10-12% cymene and other terpene hydrocarbons | | | EFSA |
| 01.007 | beta-Caryophyllene | 87-44-5 | 1324 | 2118 | 80-92% beta-caryophyllene and 15-19% C ₁₅ H ₂₄ terpene hydrocarbons (eg. valencene) | | 2 | EFSA |
| 01.008 | Myrcene | 123-35-3 | 1327 | 2197 | At least 90%; secondary components C ₁₅ H ₂₄ terpene hydrocarbons (eg. valencene); Minimum assay value may include traces of limonene, alpha- and beta-pinene and other common C ₁₀ H ₁₆ terpenes. | | 4 | EFSA |
| 01.009 | Camphene | 79-92-5 | 1323 | 2227 | At least 80%; secondary components 15-19% C ₁₅ H ₂₄ terpene hydrocarbons (eg. valencene) | | 2 | EFSA |
| 01.010 | 1-Isopropenyl-4-methylbenzene | 1195-32-0 | 1333 | 2260 | | | | EFSA |
| 01.014 | 1-Methylnaphthalene | 90-12-0 | 1335 | 11009 | | | 4 | JECFA/EFSA |
| 01.015 | Vinylbenzene | 100-42-5 | | 11022 | | | 1 | EFSA |
| 01.016 | 1,4(8),12-Bisabolatriene | 495-62-5 | 1336 | 10979 | | | | EFSA |
| 01.017 | Valencene | 4630-07-3 | 1337 | 11030 | At least 94%; secondary components 1-4% other C ₁₅ H ₂₄ sesquiterpenes | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 01.018 | beta-Ocimene | 13877-91-3 | 1338 | 11015 | At least 80%; secondary component 15-17% cis-beta-ocimene | | 4 | EFSA |
| 01.019 | alpha-Terpinene | 99-86-5 | 1339 | 11023 | At least 89%; secondary components 6-7% 1,4- and 1,8-cineole | | | EFSA |
| 01.020 | gamma-Terpinene | 99-85-4 | 1340 | 11025 | | | | EFSA |
| 01.024 | beta-Bourbonene | 5208-59-3 | 1345 | 11931 | | | 2 | EFSA |
| 01.026 | 1(5),7(11)-Guaiadiene | 88-84-6 | 1347 | | | | 2 | EFSA |
| 01.027 | Bisabola-1,8,12-triene | 17627-44-0 | | | | | | EFSA |
| 01.028 | beta-Bisabolene | 495-61-4 | | | | | | EFSA |
| 01.029 | delta-3-Carene | 13466-78-9 | 1342 | 10983 | At least 92%; secondary components 2-3% beta-pinene; 1-2% limonene; 1-2% myrcene; 0-1% p-cymene | | 2 | EFSA |
| 01.033 | 2,2-Dimethylhexane | 590-73-8 | | | | | | EFSA |
| 01.034 | 2,4-Dimethylhexane | 589-43-5 | | | | | | EFSA |
| 01.035 | 2,6-Dimethylocta-2,4,6-triene | 673-84-7 | | | | | 2 | EFSA |
| 01.038 | Dodecane | 112-40-3 | | | | | | EFSA |
| 01.039 | delta-Elemene | 20307-84-0 | | 10996 | | | | EFSA |
| 01.040 | alpha-Farnesene | 502-61-4 | 1343 | 10998 | At least 38% alpha and 29% beta (sum of cis/trans isomers); secondary components 20% bisabolene, up to 10% other isomers (valencene, bourbonene, cadinene, guaiane) | | 4 | EFSA |
| 01.045 | d-Limonene | 5989-27-5 | 1326 | 491 | | | | EFSA |
| 01.046 | l-Limonene | 5989-54-8 | | 491 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 01.054 | Pentadecane | 629-62-9 | | | | | | EFSA |
| 01.057 | Tetradecane | 629-59-4 | | | | | | EFSA |
| 01.059 | 4(10)-Thujene | 3387-41-5 | | 11018 | | | 2 | EFSA |
| 01.061 | Undeca-1,3,5-triene | 16356-11-9 | 1341 | | At least 94% (sum of cis/trans isomers); secondary component 2,4,6-undecatriene (Z,Z,E) | | 4 | EFSA |
| 01.064 | cis-3,7-Dimethyl-1,3,6-octatriene | 3338-55-4 | | | | | 2 | EFSA |
| 01.070 | 1-Octene | 111-66-0 | | | | | 2 | EFSA |
| 01.077 | 1-Methyl-1,3-cyclohexadiene | 1489-56-1 | 1344 | | | | | EFSA |
| 02.001 | 2-Methylpropan-1-ol | 78-83-1 | 251 | 49 | | | | JECFA |
| 02.002 | Propan-1-ol | 71-23-8 | 82 | 50 | | | | JECFA |
| 02.003 | Isopentanol | 123-51-3 | 52 | 51 | | | | JECFA |
| 02.004 | Butan-1-ol | 71-36-3 | 85 | 52 | | | | JECFA |
| 02.005 | Hexan-1-ol | 111-27-3 | 91 | 53 | | | | JECFA |
| 02.006 | Octan-1-ol | 111-87-5 | 97 | 54 | | | | JECFA |
| 02.007 | Nonan-1-ol | 143-08-8 | 100 | 55 | | | | JECFA |
| 02.008 | Dodecan-1-ol | 112-53-8 | 109 | 56 | | | | JECFA |
| 02.009 | Hexadecan-1-ol | 36653-82-4 | 114 | 57 | | | | JECFA |
| 02.010 | Benzyl alcohol | 100-51-6 | 25 | 58 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------|-----------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.011 | Citronellol | 106-22-9 | 1219 | 59 | At least 90%; secondary components 5-8% di-unsaturated and saturated C10 alcohols, 1% citronellyl acetate, 1% citronellal | | | EFSA |
| 02.012 | Geraniol | 106-24-1 | 1223 | 60 | | | | EFSA |
| 02.013 | Linalool | 78-70-6 | 356 | 61 | | | | JECFA |
| 02.014 | alpha-Terpineol | 98-55-5 | 366 | 62 | | | | JECFA |
| 02.015 | Menthol | 89-78-1 | 427 | 63 | | | | JECFA |
| 02.016 | DL-Borneol | 507-70-0 | 1385 | 64 | | | | EFSA |
| 02.017 | Cinnamyl alcohol | 104-54-1 | 647 | 65 | | | | EFSA |
| 02.018 | Nerolidol | 7212-44-4 | 1646 | 67 | | | | EFSA |
| 02.019 | 2-Phenylethan-1-ol | 60-12-8 | 987 | 68 | | | | EFSA |
| 02.020 | Hex-2-en-1-ol | 2305-21-7 | 1354 | | | | 2 | EFSA |
| 02.021 | Heptan-1-ol | 111-70-6 | 94 | 70 | | | | JECFA |
| 02.022 | Octan-2-ol | 123-96-6 | 289 | 71 | | | | JECFA |
| 02.023 | Oct-1-en-3-ol | 3391-86-4 | 1152 | | | | 1 | EFSA |
| 02.024 | Decan-1-ol | 112-30-1 | 103 | 73 | | | | JECFA |
| 02.026 | 3,7-Dimethyloctan-1-ol | 106-21-8 | 272 | 75 | At least 90%; secondary components 5-7% geraniol and citronellol | | | JECFA |
| 02.027 | (-)-Rhodinol | 6812-78-8 | 1222 | 76 | | | | EFSA |
| 02.028 | 3,7-Dimethyloctan-3-ol | 78-69-3 | 357 | 77 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.029 | 3,7,11-Trimethyldodeca-2,6,10-trien-1-ol | 4602-84-0 | 1230 | 78 | | | | EFSA |
| 02.030 | alpha-Pentylcinnamyl alcohol | 101-85-9 | 674 | 79 | | | | EFSA |
| 02.031 | 3-Phenylpropan-1-ol | 122-97-4 | 636 | 80 | | | | EFSA |
| 02.033 | 1-Phenylpropan-1-ol | 93-54-9 | 822 | 82 | | | | EFSA |
| 02.034 | 1-Phenylpentan-2-ol | 705-73-7 | 825 | 83 | | | | EFSA |
| 02.035 | 2-Methyl-1-phenylpropan-2-ol | 100-86-7 | 1653 | 84 | | | | EFSA |
| 02.036 | 4-Phenylbutan-2-ol | 2344-70-9 | 815 | 85 | | | | EFSA |
| 02.037 | 3-Methyl-1-phenylpentan-3-ol | 10415-87-9 | 1649 | 86 | | | | EFSA |
| 02.038 | Fenchyl alcohol | 1632-73-1 | 1397 | 87 | | | | EFSA |
| 02.039 | 4-Isopropylbenzyl alcohol | 536-60-7 | 864 | 88 | | | | EFSA |
| 02.040 | Pentan-1-ol | 71-41-0 | 88 | 514 | | | | JECFA |
| 02.041 | 2-Methylbutan-2-ol | 75-85-4 | | 515 | | | | EFSA |
| 02.042 | 2-(4-Methylphenyl)propan-2-ol | 1197-01-9 | 1650 | 530 | At least 90%; secondary component 9-11% p-isopropenyltoluene | | | EFSA |
| 02.043 | 2-Ethylbutan-1-ol | 97-95-0 | | 543 | | | | SCF/CoE |
| 02.044 | Heptan-3-ol | 589-82-2 | 286 | 544 | | | | JECFA |
| 02.045 | Heptan-2-ol | 543-49-7 | 284 | 554 | | | | JECFA |
| 02.047 | 3,7-Dimethyloctane-1,7-diol | 107-74-4 | 610 | 559 | | | | JECFA |
| 02.049 | Nona-2,6-dien-1-ol | 7786-44-9 | 1184 | 589 | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.050 | Pent-2-en-1-ol | 20273-24-9 | 1793 | 665 | | | 2 | EFSA |
| 02.051 | 5-Phenylpentan-1-ol | 10521-91-2 | 675 | 674 | | | | EFSA |
| 02.052 | 2-Methylpropan-2-ol | 75-65-0 | | 698 | | | | EFSA |
| 02.054 | p-Menthane-1,8-diol | 80-53-5 | | 701 | | | | EFSA |
| 02.055 | 3,5,5-Trimethylhexan-1-ol | 3452-97-9 | 268 | 702 | | | | JECFA |
| 02.056 | Hex-3(cis)-en-1-ol | 928-96-1 | 315 | 750c | | | | JECFA |
| 02.057 | Undecan-1-ol | 112-42-5 | 106 | 751 | | | | JECFA |
| 02.058 | (Z)-Nerol | 106-25-2 | 1224 | 2018 | | | | EFSA |
| 02.059 | DL-Isoborneol | 124-76-5 | 1386 | 2020 | At least 92%; secondary component 3-5% borneol | | | EFSA |
| 02.060 | p-Mentha-1,8-dien-7-ol | 536-59-4 | 974 | | | | 2 | EFSA |
| 02.061 | Dihydrocarveol | 619-01-2 | 378 | 2025 | | | | JECFA |
| 02.062 | Carveol | 99-48-9 | 381 | 2027 | | | | JECFA |
| 02.063 | d-Neomenthol | 2216-52-6 | 428 | 2028 | | | | JECFA |
| 02.064 | 1-Phenylethan-1-ol | 98-85-1 | 799 | 2030 | | | | EFSA |
| 02.065 | 4-Methyl-1-phenylpentan-2-ol | 7779-78-4 | 827 | 2031 | | | | EFSA |
| 02.066 | 4-Phenylbut-3-en-2-ol | 17488-65-2 | 819 | | | | 2 | EFSA |
| 02.067 | 1R,2S,5R-isopulegol | 89-79-2 | 755 | 2033 | | | 4 | EFSA |
| 02.070 | Cyclohexanol | 108-93-0 | | 2138 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.071 | p-Menthan-2-ol | 499-69-4 | 376 | 2228 | | | | JECFA |
| 02.072 | 4-Terpinenol | 562-74-3 | 439 | 2229 | | | | JECFA |
| 02.073 | 2-Phenylpropan-1-ol | 1123-85-9 | 1459 | 2257 | | | | EFSA |
| 02.074 | Hex-4-en-1-ol | 6126-50-7 | 318 | 2295 | | | | JECFA |
| 02.075 | (1R,2S,5S)-neo-Dihydrocarveol | 18675-33-7 | | 2296 | | | | EFSA |
| 02.076 | 2-Methylbutan-1-ol | 137-32-6 | 1199 | 2346 | | | | EFSA |
| 02.077 | Pentan-3-ol | 584-02-1 | | 2349 | | | | EFSA |
| 02.078 | Ethanol | 64-17-5 | 41 | 11891 | | | | JECFA |
| 02.079 | Isopropanol | 67-63-0 | 277 | | | | | JECFA |
| 02.080 | 1-(p-Tolyl)ethan-1-ol | 536-50-5 | 805 | 10197 | | | | EFSA |
| 02.081 | 2,6-Dimethylheptan-4-ol | 108-82-7 | 303 | 11719 | At least 90%; secondary component 8-9% 2-heptanol | | | JECFA |
| 02.082 | 2-Ethylhexan-1-ol | 104-76-7 | 267 | 11763 | | | | JECFA |
| 02.083 | p-Menth-1-en-3-ol | 491-04-3 | 434 | 10248 | | | | JECFA |
| 02.085 | Sabinene hydrate | 546-79-2 | 441 | 10309 | | | | JECFA |
| 02.086 | Undecan-2-ol | 1653-30-1 | 297 | 11826 | | | | JECFA |
| 02.087 | Nonan-2-ol | 628-99-9 | 293 | 11803 | | | | JECFA |
| 02.088 | Pentan-2-ol | 6032-29-7 | 280 | 11696 | | | | JECFA |
| 02.089 | Hexan-3-ol | 623-37-0 | 282 | 11775 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.090 | Non-2(trans)-en-1-ol | 31502-14-4 | 1365 | 10292 | | | 2 | EFSA |
| 02.091 | Myrtenol | 515-00-4 | 981 | 10285 | | | 2 | EFSA |
| 02.092 | Dehydrodihydroionol | 57069-86-0 | 397 | 10195 | At least 70%; secondary component 25-27% tetrahydroionone | | | JECFA |
| 02.093 | Non-6-en-1-ol | 35854-86-5 | 324 | 10294 | | | | JECFA |
| 02.094 | Oct-3-en-1-ol | 20125-84-2 | 321 | 10296 | | | | JECFA |
| 02.095 | 2-Ethylfenchol | 18368-91-7 | 440 | 10208 | | | | JECFA |
| 02.096 | 1-Terpinenol | 586-82-3 | 373 | 10252 | | | | JECFA |
| 02.097 | beta-Terpineol | 138-87-4 | 374 | 10254 | | | | JECFA |
| 02.098 | Octan-3-ol | 589-98-0 | 291 | 11715 | | | | JECFA |
| 02.099 | Pent-1-en-3-ol | 616-25-1 | 1150 | 11717 | | | 1 | EFSA |
| 02.100 | Pinocarveol | 5947-36-4 | 1403 | 10303 | | | | EFSA |
| 02.101 | Pin-2-en-4-ol | 473-67-6 | 1404 | 10304 | | | | EFSA |
| 02.102 | Oct-3-en-2-ol | 76649-14-4 | 1140 | | | | 1 | EFSA |
| 02.103 | Decan-3-ol | 1565-81-7 | 295 | 10194 | | | | JECFA |
| 02.104 | Hex-1-en-3-ol | 4798-44-1 | 1151 | 10220 | | | 1 | EFSA |
| 02.105 | 4-(2,6,6-Trimethyl-2-cyclohexenyl)but-3-en-2-ol | 25312-34-9 | 391 | | | | 2 | JECFA |
| 02.106 | 4-(2,2,6-Trimethyl-1-cyclohexenyl)but-3-en-2-ol | 22029-76-1 | 392 | | At least 92%; secondary components 3-8% ionol and ionone | | 2 | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.107 | Dihydro-beta-ionol | 3293-47-8 | 395 | | | | | JECFA |
| 02.108 | 2-Methyl-4-phenylbutan-2-ol | 103-05-9 | 1477 | 10281 | | | | EFSA |
| 02.109 | 3-Methylbut-2-en-1-ol | 556-82-1 | 1200 | 11795 | | | | EFSA |
| 02.110 | 2,6-Dimethylhept-6-en-1-ol | 36806-46-9 | 348 | | At least 90%; secondary component 5-10% 6-methyl-5-hepten-2-one | | | JECFA |
| 02.111 | 3-Methylbutan-2-ol | 598-75-4 | 300 | | | | | JECFA |
| 02.112 | Non-2(cis)-en-1-ol | 41453-56-9 | 1369 | 10292 | | | 2 | EFSA |
| 02.113 | Oct-5(cis)-en-1-ol | 64275-73-6 | 322 | | At least 90%; secondary component 7-9% trans-5-octen-1-ol | | | JECFA |
| 02.114 | 2-(2,2,3-Trimethylcyclopent-3-enyl)ethan-1-ol | 1901-38-8 | 970 | | | | | EFSA |
| 02.115 | 3-Methylpentan-1-ol | 589-35-5 | 263 | 10275 | | | | JECFA |
| 02.119 | Cedrenol | 28231-03-0 | | 10189 | | | | EFSA |
| 02.120 | (+)-Cedrol | 77-53-2 | | 10190 | | | | EFSA |
| 02.121 | Butan-2-ol | 78-92-2 | | 11735 | | | | SCF/CoE |
| 02.122 | p-Mentha-1,8(10)-dien-9-ol | 3269-90-7 | | | | | 2 | EFSA |
| 02.123 | 2-Methylbut-3-en-2-ol | 115-18-4 | | 11794 | | | | EFSA |
| 02.124 | 6-Methylhept-5-en-2-ol | 1569-60-4 | | 10264 | | | | EFSA |
| 02.125 | Undec-10-en-1-ol | 112-43-6 | | 10319 | | | | EFSA |
| 02.126 | Tetradecan-1-ol | 112-72-1 | | 10314 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.128 | p-Anisyl alcohol | 105-13-5 | 871 | 66 | | | | EFSA |
| 02.129 | (l)-alpha-Bisabolol | 23089-26-1 | | 10178 | Sum of isomers at least 95% | | | EFSA |
| 02.131 | But-3-en-2-ol | 598-32-3 | | | | | 1 | EFSA |
| 02.132 | Butane-1,3-diol | 107-88-0 | | | | | | EFSA |
| 02.133 | Butane-2,3-diol | 513-85-9 | | 10181 | | | | EFSA |
| 02.134 | 2-Cyclohexylethan-1-ol | 4442-79-9 | | | | | | EFSA |
| 02.135 | Cyclopentanol | 96-41-3 | | 10193 | | | | EFSA |
| 02.136 | Dec-1-en-3-ol | 51100-54-0 | 1153 | | | | 1 | EFSA |
| 02.137 | Dec-2-en-1-ol | 22104-80-9 | 1794 | 11750 | | | 2 | EFSA |
| 02.138 | Dec-9-en-1-ol | 13019-22-2 | | | | | | EFSA |
| 02.139 | Deca-2,4-dien-1-ol | 18409-21-7 | 1189 | | | | 2 | EFSA |
| 02.140 | 1,2-Dihydrolinalool | 2270-57-7 | | | | | | EFSA |
| 02.141 | 2-(6,6-Dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethan-1-ol | 128-50-7 | 986 | | | | | EFSA |
| 02.142 | 3,3-Dimethylbutan-2-ol | 464-07-3 | | | | | | EFSA |
| 02.144 | 2,6-Dimethyloct-7-en-2-ol | 18479-58-8 | | | | | | EFSA |
| 02.145 | 2,6-Dimethylocta-1,5,7-trien-3-ol | 29414-56-0 | | | | | 1 | EFSA |
| 02.146 | (E)-3,7-Dimethylocta-1,5,7-trien-3-ol | 53834-70-1 | | 10202 | At least 93%; secondary components 2-3% linalool, 1-2% linalool oxide and up to 1% nerol oxide | | 4 | EFSA |
| 02.147 | 3,6-Dimethyloctan-3-ol | 151-19-9 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.148 | Dodecan-2-ol | 10203-28-8 | | 11760 | | | | EFSA |
| 02.149 | (-)-alpha-Elemol | 639-99-6 | | 10205 | | | | EFSA |
| 02.150 | (E,E)-geranyl linalool | 1113-21-9 | | | | | | EFSA |
| 02.152 | Hept-3-en-1-ol | 10606-47-0 | | 10219 | | | | EFSA |
| 02.153 | Hepta-2,4-dien-1-ol | 33467-79-7 | 1784 | | | | 2 | EFSA |
| 02.154 | Heptadecan-1-ol | 1454-85-9 | | | | | | EFSA |
| 02.155 | 1-Hepten-3-ol | 4938-52-7 | 1842 | 10218 | | | 1 | EFSA |
| 02.156 | Hex-2(cis)-en-1-ol | 928-94-9 | 1374 | 69 | At least 92%; secondary component 3-4% hex-2(trans)-en-1-ol | | 2 | EFSA |
| 02.159 | Hex-3-en-1-ol | 544-12-7 | 315 | 750 | | | | SCF/CoE |
| 02.162 | Hexa-2,4-dien-1-ol | 111-28-4 | 1174 | | | | 2 | EFSA |
| 02.164 | 4-Hydroxy-3,5-dimethoxybenzyl alcohol | 530-56-3 | | | | | | EFSA |
| 02.165 | 4-Hydroxybenzyl alcohol | 623-05-2 | 955 | | | | | EFSA |
| 02.166 | 2-(4-Hydroxyphenyl)ethan-1-ol | 501-94-0 | | 10226 | | | | EFSA |
| 02.167 | (1R,2R,5S)-Isodihydrocarveol | 18675-35-9 | | | | | | EFSA |
| 02.168 | Isophytol | 505-32-8 | | 10233 | | | | EFSA |
| 02.170 | (R)-(-)-Lavandulol | 498-16-8 | | | | | | EFSA |
| 02.171 | p-Menthan-8-ol | 498-81-7 | | | | | | EFSA |
| 02.173 | 3-(4-Methoxyphenyl)propan-1-ol | 5406-18-8 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.174 | 2-Methylbut-2-en-1-ol | 4675-87-0 | | 10258 | | | 1 | EFSA |
| 02.175 | 2-Methylbut-3-en-1-ol | 4516-90-9 | | 10259 | | | | EFSA |
| 02.176 | 3-Methylbut-3-en-1-ol | 763-32-6 | | 10260 | | | | EFSA |
| 02.177 | 2-Methylhexan-3-ol | 617-29-8 | | 10266 | | | | EFSA |
| 02.178 | 2-Methyloctan-1-ol | 818-81-5 | | | | | | EFSA |
| 02.180 | 4-Methylpentan-1-ol | 626-89-1 | | 10278 | | | | EFSA |
| 02.181 | 2-Methylpentan-2-ol | 590-36-3 | | 10274 | | | | EFSA |
| 02.182 | 3-Methylpentan-2-ol | 565-60-6 | | 10276 | | | | EFSA |
| 02.183 | 4-Methylpentan-2-ol | 108-11-2 | | 10279 | | | | EFSA |
| 02.184 | 3-Methylpentan-3-ol | 77-74-7 | | 10277 | | | | EFSA |
| 02.186 | Myrtanol | 514-99-8 | | | | | | EFSA |
| 02.187 | Non-1-en-3-ol | 21964-44-3 | | 10291 | | | 1 | EFSA |
| 02.188 | Nona-2,4-dien-1-ol | 62488-56-6 | 1183 | 11802 | At least 92%; secondary component 3-4% 2-nonen-1-ol | | 2 | EFSA |
| 02.189 | (Z,Z)-Nona-3,6-dien-1-ol | 76649-25-7 | 1283 | 10289 | | | | EFSA |
| 02.190 | Nonan-3-ol | 624-51-1 | | 10290 | | | | EFSA |
| 02.192 | Oct-2-en-1-ol | 22104-78-5 | | | | | 2 | EFSA |
| 02.193 | Oct-2-en-4-ol | 4798-61-2 | 1141 | | | | 1 | EFSA |
| 02.194 | Octa-1,5-dien-3-ol | 83861-74-9 | | | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.195 | Octa-(3Z,5E)-dien-1-ol | 70664-96-9 | | | | | | EFSA |
| 02.196 | Octadecan-1-ol | 112-92-5 | | | | | | EFSA |
| 02.197 | 1,2,3,4,4a,5,6,7-Octahydro-2,5,5-trimethylnaphthalen-2-ol | 41199-19-3 | | 10173 | | | | EFSA |
| 02.198 | Octane-1,3-diol | 23433-05-8 | | | | | | EFSA |
| 02.201 | Pent-4-en-1-ol | 821-09-0 | | | | | | EFSA |
| 02.202 | Pentadecan-1-ol | 629-76-5 | | | | | | EFSA |
| 02.203 | 2-Phenylpropan-2-ol | 617-94-7 | | 11704 | | | | EFSA |
| 02.204 | Phytol | 150-86-7 | 1832 | 10302 | | | | EFSA |
| 02.205 | Piperonyl alcohol | 495-76-1 | | 10306 | | | | EFSA |
| 02.206 | (-)-Sclareol | 515-03-7 | | 10311 | | | | EFSA |
| 02.207 | Thujyl alcohol | 21653-20-3 | 1865 | | | | | EFSA |
| 02.209 | 3,3,5-Trimethylcyclohexan-1-ol | 116-02-9 | 1099 | | | | | EFSA |
| 02.210 | Undec-2-en-1-ol | 37617-03-1 | 1384 | | | | 2 | EFSA |
| 02.211 | Undeca-1,5-dien-3-ol | 56722-23-7 | | | | | 1 | EFSA |
| 02.213 | Vanillyl alcohol | 498-00-0 | 886 | 690 | | | | EFSA |
| 02.214 | Vetiverol | 89-88-3 | 1866 | 10321 | | | 2 | EFSA |
| 02.216 | 12-beta-Santalén-14-ol | 77-42-9 | | 74 | | | 2 | EFSA |
| 02.217 | 12-alpha-Santalén-14-ol | 115-71-9 | | 74 | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.219 | 2,6-Dimethyl-2-heptanol | 13254-34-7 | | | | | | EFSA |
| 02.222 | 3-Pentenol-1 | 39161-19-8 | | 10298 | | | | EFSA |
| 02.224 | 3-(1-Methoxy)propane-1,2-diol | 87061-04-9 | 1408 | | | | | EFSA |
| 02.226 | [S-(cis)]-3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol | 142-50-7 | | 67 | | | | EFSA |
| 02.229 | (-)-3,7-Dimethyl-6-octen-1-ol | 7540-51-4 | | | At least 90% cis-isomer; secondary components 2-6% di-unsaturated and saturated C10 alcohols, 2-4% citronellyl acetate and 2-3% citronellal | | 1 | EFSA |
| 02.230 | Terpineol | 8000-41-7 | | | Sum of isomers: 91-99 %. Relative contribution of each isomer: 55-75% alpha, 16-23% gamma, 1-10% cis-beta, 1-13% trans-beta, 0-1% delta | | | EFSA |
| 02.231 | trans-2, cis-6-Nonadien-1-ol | 28069-72-9 | | | | | 2 | EFSA |
| 02.234 | (Z)-Non-3-en-1-ol | 10340-23-5 | | 10293 | | | | EFSA |
| 02.242 | 2-Butoxyethan-1-ol | 111-76-2 | | 10182 | | | | EFSA |
| 02.243 | (E,Z)-3,6-Nonadien-1-ol | 56805-23-3 | 1284 | | At least 92%; secondary component 6% (E,E)-3,6-nonadien-1-ol | | | EFSA |
| 02.245 | 2,3,4-Trimethyl-3-pentanol | 3054-92-0 | 1643 | | | | | EFSA |
| 02.246 | p-Menthane-3,8-diol | 42822-86-6 | 1416 | | | | | EFSA |
| 02.247 | l-Menthoxyethanol | 38618-23-4 | 1853 | | | | | EFSA |
| 02.248 | Vanillin 3-(l-menthoxy)propane-1,2-diol acetal | 180964-47-0 | 1879 | | | | | EFSA |
| 02.249 | (4Z)-Hepten-1-ol | 6191-71-5 | 1280 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 02.250 | 2,4,8-Trimethyl-7-nonen-2-ol | 437770-28-0 | 1644 | | | | | EFSA |
| 02.251 | 2,4,8-Trimethyl-3,7-nonadien-2-ol | 479547-57-4 | 1645 | | | | | EFSA |
| 02.252 | 4,8-Dimethyl-3,7-nonadien-2-ol | 67845-50-5 | 1841 | | | | 1 | EFSA |
| 02.253 | 2,4-Dimethyl-4-nonanol | 74356-31-3 | 1850 | | | | | EFSA |
| 02.254 | (1R, 2S, 5S)-3-Methoxy-2-methyl-propane-1,2-diol | 195863-84-4 | 1411 | | | | | EFSA |
| 02.255 | (Z)-4-Hepten-2-ol | 66642-85-1 | | | At least 91%; secondary components (E)-4-hepten-2-ol (4-5%), 2-heptanol (up to 1%), trans-3-hepten-2-ol (up to 1%) cis-3-hepten-2-ol (up to 1%). | | | EFSA |
| 03.001 | 1,8-Cineole | 470-82-6 | 1234 | 182 | | | | EFSA |
| 03.003 | Benzyl ethyl ether | 539-30-0 | 1252 | 521 | | | | EFSA |
| 03.004 | Dibenzyl ether | 103-50-4 | 1256 | 11856 | | | | EFSA |
| 03.005 | 2-Butyl ethyl ether | 2679-87-0 | 1231 | 10911 | | | | EFSA |
| 03.006 | 2-Methoxyethyl benzene | 3558-60-9 | 1254 | 11812 | | | | EFSA |
| 03.007 | 1,4-Cineole | 470-67-7 | 1233 | 11225 | At least 75%; secondary component 20-25% 1,8-cineole. | | | EFSA |
| 03.008 | 2-Acetoxy-1,8-cineole | 57709-95-2 | | | | | | EFSA |
| 03.010 | Benzyl butyl ether | 588-67-0 | 1253 | 520 | At least 93%; secondary component 2-5% benzyl alcohol | | | EFSA |
| 03.011 | Benzyl methyl ether | 538-86-3 | | 10910 | | | | EFSA |
| 03.012 | Benzyl octyl ether | 54852-64-1 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 03.015 | Ethyl geranyl ether | 40267-72-9 | | | | | | EFSA |
| 03.016 | Hexyl methyl ether | 4747-07-3 | | | | | | EFSA |
| 03.019 | Prenyl ethyl ether | 22094-00-4 | 1232 | | | | | EFSA |
| 03.020 | alpha-Terpinyll methyl ether | 14576-08-0 | | | | | | EFSA |
| 03.022 | 1-Methoxy-1-decene | 79930-37-3 | 1802 | | | | | EFSA |
| 03.023 | 1-Ethoxyethyl acetate | 1608-72-6 | | | | | | EFSA |
| 03.024 | Digeranyl ether | 31147-36-1 | | | | | | EFSA |
| 04.002 | 6-Ethoxyprop-3-enylphenol | 94-86-0 | 1264 | 170 | | | | EFSA |
| 04.003 | Eugenol | 97-53-0 | 1529 | 171 | | | | EFSA |
| 04.004 | Isoeugenol | 97-54-1 | 1260 | 172 | | | | EFSA |
| 04.005 | 2-Methoxyphenol | 90-05-1 | 713 | 173 | | | | EFSA |
| 04.006 | Thymol | 89-83-8 | 709 | 174 | | | | EFSA |
| 04.007 | 2-Methoxy-4-methylphenol | 93-51-6 | 715 | 175 | | | | EFSA |
| 04.008 | 4-Ethylguaiacol | 2785-89-9 | 716 | 176 | | | | EFSA |
| 04.009 | 2-Methoxy-4-vinylphenol | 7786-61-0 | 725 | 177 | | | | EFSA |
| 04.010 | 1-Methoxy-4-(prop-1(trans)-enyl)benzene | 4180-23-8 | 217 | 183 | | | | JECFA |
| 04.013 | 1,2-Dimethoxy-4-(prop-1-enyl)benzene | 93-16-3 | 1266 | 186 | | | | EFSA |
| 04.014 | 1-Methoxy-2-methylbenzene | 578-58-5 | 1242 | 187 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-----------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 04.015 | 1-Methoxy-4-methylbenzene | 104-93-8 | 1243 | 188 | | | | EFSA |
| 04.016 | 1,3-Dimethoxybenzene | 151-10-0 | 1249 | 189 | | | | EFSA |
| 04.017 | 1-Ethoxy-2-methoxy-4-(prop-1-enyl)benzene | 7784-67-0 | 1267 | 190 | | | | EFSA |
| 04.018 | Benzyl isoeugenyl ether | 120-11-6 | 1268 | 522 | | | | EFSA |
| 04.019 | 2,5-Dimethylphenol | 95-87-4 | 706 | 537 | | | | EFSA |
| 04.020 | 3,5-Dimethylphenol | 108-68-9 | | 538 | | | | EFSA |
| 04.021 | 3-Ethylphenol | 620-17-7 | | 549 | | | | EFSA |
| 04.022 | 4-Ethylphenol | 123-07-9 | 694 | 550 | | | | EFSA |
| 04.026 | 3-Methylphenol | 108-39-4 | 692 | 617 | | | | EFSA |
| 04.027 | 2-Methylphenol | 95-48-7 | 691 | 618 | | | | EFSA |
| 04.028 | 4-Methylphenol | 106-44-5 | 693 | 619 | | | | EFSA |
| 04.029 | Benzene-1,2-diol | 120-80-9 | | 680 | | | | SCF/CoE |
| 04.031 | Carvacrol | 499-75-2 | 710 | 2055 | | | | EFSA |
| 04.032 | Anisole | 100-66-3 | 1241 | 2056 | | | | EFSA |
| 04.033 | beta-Naphthyl ethyl ether | 93-18-5 | 1258 | 2058 | | | | EFSA |
| 04.034 | 1,4-Dimethoxybenzene | 150-78-7 | 1250 | 2059 | | | | EFSA |
| 04.035 | Diphenyl ether | 101-84-8 | 1255 | 2201 | | | | EFSA |
| 04.036 | 2,6-Dimethoxyphenol | 91-10-1 | 721 | 2233 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 04.037 | 4-Ethoxyphenol | 622-62-8 | 720 | 2258 | | | | EFSA |
| 04.038 | Carvacryl ethyl ether | 4732-13-2 | 1247 | 11840 | | | | EFSA |
| 04.039 | 1-Methoxy-4-propylbenzene | 104-45-0 | 1244 | 11835 | | | | EFSA |
| 04.040 | 1,2-Dimethoxy-4-vinylbenzene | 6380-23-0 | 1251 | 11228 | | | | EFSA |
| 04.041 | Phenol | 108-95-2 | 690 | 11811 | | | | EFSA |
| 04.042 | 2,6-Dimethylphenol | 576-26-1 | 707 | 11261 | | | | EFSA |
| 04.043 | 1-Isopropyl-2-methoxy-4-methylbenzene | 1076-56-8 | 1246 | 11245 | | | | EFSA |
| 04.044 | 2-Isopropylphenol | 88-69-7 | 697 | 11234 | | | | EFSA |
| 04.045 | 2-(Ethoxymethyl)phenol | 20920-83-6 | 714 | 11905 | | | | EFSA |
| 04.046 | 2-Propylphenol | 644-35-9 | 695 | 11908 | | | | EFSA |
| 04.047 | Benzene-1,3-diol | 108-46-3 | 712 | 11250 | | | | EFSA |
| 04.048 | 3,4-Dimethylphenol | 95-65-8 | 708 | 11262 | | | | EFSA |
| 04.049 | 2-Methoxy-4-propylphenol | 2785-87-7 | 717 | | | | | EFSA |
| 04.050 | 4-Propylphenol | 645-56-7 | 696 | | | | | EFSA |
| 04.051 | 4-Allyl-2,6-dimethoxyphenol | 6627-88-9 | 726 | 11214 | | | | EFSA |
| 04.052 | 4-Ethyl-2,6-dimethoxyphenol | 14059-92-8 | 723 | 11231 | | | | EFSA |
| 04.053 | 4-Methyl-2,6-dimethoxyphenol | 6638-05-7 | 722 | | | | | EFSA |
| 04.054 | Isobutyl beta-naphthyl ether | 2173-57-1 | 1259 | 11886 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 04.055 | 2,6-Dimethoxy-4-prop-1-enylphenol | 20675-95-0 | 1265 | | | | | EFSA |
| 04.056 | 2,6-Dimethoxy-4-propylphenol | 6766-82-1 | 724 | | | | | EFSA |
| 04.057 | 4-Vinylphenol | 2628-17-3 | 711 | 11257 | | | | EFSA |
| 04.058 | 4-Allylphenol | 501-92-8 | 1527 | 11218 | | | | EFSA |
| 04.059 | Carvacryl methyl ether | 6379-73-3 | | 11224 | | | | EFSA |
| 04.061 | 2,6-Dimethoxy-4-vinylphenol | 28343-22-8 | | 11229 | | | | EFSA |
| 04.062 | 1,2-Dimethoxybenzene | 91-16-7 | 1248 | 10320 | | | | EFSA |
| 04.063 | 1,3-Dimethyl-4-methoxybenzene | 6738-23-4 | 1245 | | | | | EFSA |
| 04.064 | 4-(1,1-Dimethylethyl)phenol | 98-54-4 | 733 | | | | | EFSA |
| 04.065 | 2,3-Dimethylphenol | 526-75-0 | | 11258 | | | | EFSA |
| 04.066 | 2,4-Dimethylphenol | 105-67-9 | | 11259 | | | | EFSA |
| 04.067 | 1-Ethoxy-2-methoxybenzene | 17600-72-5 | | | | | | EFSA |
| 04.068 | 1-Ethoxy-4-methoxybenzene | 5076-72-2 | | | | | | EFSA |
| 04.069 | 1-Ethyl-4-methoxybenzene | 1515-95-3 | | | | | | EFSA |
| 04.070 | 2-Ethylphenol | 90-00-6 | | 11232 | | | | EFSA |
| 04.072 | 3-Isopropylphenol | 618-45-1 | | | | | | EFSA |
| 04.073 | 4-Isopropylphenol | 99-89-8 | | | | | | EFSA |
| 04.074 | 2-Methoxynaphthalene | 93-04-9 | 1257 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 04.075 | 1-Methoxynaphthalene | 2216-69-5 | | | | | | EFSA |
| 04.076 | 3-Methoxyphenol | 150-19-6 | | | | | | EFSA |
| 04.077 | 4-Methoxyphenol | 150-76-5 | | 11241 | | | | EFSA |
| 04.078 | 5-Methyl-2-(tert-butyl)phenol | 88-60-8 | | | | | | EFSA |
| 04.079 | Methyl 4-methoxybenzyl ether | 1515-81-7 | | | | | | EFSA |
| 04.084 | 1,2,3-Trimethoxybenzene | 634-36-6 | | | | | | EFSA |
| 04.085 | 2,3,6-Trimethylphenol | 2416-94-6 | 737 | | | | | EFSA |
| 04.088 | 1-Methoxy-4-(1-propenyl)benzene | 104-46-1 | | 183 | | | | CoE |
| 04.091 | Ethyl 4-hydroxybenzyl ether | 57726-26-8 | | | | | | EFSA |
| 04.092 | 4-Hydroxybenzyl methyl ether | 5355-17-9 | | | | | | EFSA |
| 04.093 | Butyl vanillyl ether | 82654-98-6 | 888 | | | | | EFSA |
| 04.094 | Ethyl 4-hydroxy-3-methoxybenzyl ether | 13184-86-6 | 887 | | | | | EFSA |
| 04.095 | 2,4,6-Trimethyl phenol | 527-60-6 | | | | | | EFSA |
| 04.096 | 2-Methoxy-6-(2-propenyl)phenol | 579-60-2 | 1528 | | | | | EFSA |
| 04.097 | 4-Prop-1-enylphenol | 539-12-8 | | | | | | EFSA |
| 05.001 | Acetaldehyde | 75-07-0 | 80 | 89 | | | | JECFA |
| 05.002 | Propanal | 123-38-6 | 83 | 90 | | | | JECFA |
| 05.003 | Butanal | 123-72-8 | 86 | 91 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------|-----------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.004 | 2-Methylpropanal | 78-84-2 | 252 | 92 | | | | JECFA |
| 05.005 | Pentanal | 110-62-3 | 89 | 93 | | | | JECFA |
| 05.006 | 3-Methylbutanal | 590-86-3 | 258 | 94 | | | | JECFA |
| 05.007 | 2-Ethylbutanal | 97-96-1 | 256 | 95 | | | | JECFA |
| 05.008 | Hexanal | 66-25-1 | 92 | 96 | | | | JECFA |
| 05.009 | Octanal | 124-13-0 | 98 | 97 | At least 92%; secondary component 4-7% 2-methyl-heptanal | | | JECFA |
| 05.010 | Decanal | 112-31-2 | 104 | 98 | At least 92%; secondary component 4-7% 2-methyl-nonanal | | | JECFA |
| 05.011 | Dodecanal | 112-54-9 | 110 | 99 | At least 92%; secondary components 3-6% tetradecanal; 2-5% decanal; 1-2% hexadecanal | | | JECFA |
| 05.012 | 3,7-Dimethyl-7-hydroxyoctanal | 107-75-5 | 611 | 100 | | | | JECFA |
| 05.013 | Benzaldehyde | 100-52-7 | 22 | 101 | | | | EFSA |
| 05.014 | Cinnamaldehyde | 104-55-2 | 656 | 102 | | | | EFSA |
| 05.015 | 4-Methoxybenzaldehyde | 123-11-5 | 878 | 103 | | | | EFSA |
| 05.016 | Piperonal | 120-57-0 | 896 | 104 | | | | EFSA |
| 05.017 | Veratraldehyde | 120-14-9 | 877 | 106 | | | | EFSA |
| 05.018 | Vanillin | 121-33-5 | 889 | 107 | | | | EFSA |
| 05.019 | Ethyl vanillin | 121-32-4 | 893 | 108 | | | | EFSA |
| 05.020 | Citral | 5392-40-5 | 1225 | 109 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.021 | Citronellal | 106-23-0 | 1220 | 110 | At least 85%; secondary components 12-14% mixture of terpenoid materials (mainly 1,8-cineole, 2-isopropylidene-5-methylcyclohexanol, linalool, citronellyl acetate and other naturally occurring terpenes) | | | EFSA |
| 05.022 | 4-Isopropylbenzaldehyde | 122-03-2 | 868 | 111 | | | | EFSA |
| 05.023 | 2,6-Dimethyloctanal | 7779-07-9 | 273 | 112 | | | | JECFA |
| 05.024 | 2-Methyloctanal | 7786-29-0 | 270 | 113 | | | | JECFA |
| 05.025 | Nonanal | 124-19-6 | 101 | 114 | At least 92%; secondary component 4-8% 2-methyl-octanal | | | JECFA |
| 05.026 | o-Tolualdehyde | 529-20-4 | | | | | 1 | EFSA |
| 05.027 | Tolualdehyde | 1334-78-7 | 866 | 115 | At least 95% (sum of o,m,p-isomers) | | | EFSA |
| 05.028 | m-Tolualdehyde | 620-23-5 | | | | | 1 | EFSA |
| 05.029 | p-Tolualdehyde | 104-87-0 | | | | | 1 | EFSA |
| 05.030 | Phenylacetaldehyde | 122-78-1 | 1002 | 116 | | | | EFSA |
| 05.031 | Heptanal | 111-71-7 | 95 | 117 | At least 92%; secondary component 4-7% 2-methyl-hexanal | | | EFSA |
| 05.032 | Tetradecanal | 124-25-4 | 112 | 118 | At least 85%; secondary components 10-12% dodecanal, hexadecanal, and octadecanal | | | JECFA |
| 05.033 | 2-Ethylhept-2-enal | 10031-88-6 | 1216 | 120 | | | 1 | EFSA |
| 05.034 | Undecanal | 112-44-7 | 107 | 121 | At least 92%; secondary component 4-8% 2-methyl-decanal | | | JECFA |
| 05.035 | Undec-10-enal | 112-45-8 | 330 | 122 | | | | JECFA |
| 05.036 | Undec-9-enal | 143-14-6 | 329 | 123 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.037 | 2-Dodecenal | 4826-62-4 | 1350 | 124 | At least 93%; secondary component 3-4% 2-dodecenoic acid | | 2 | EFSA |
| 05.038 | 2-Phenylpropanal | 93-53-8 | 1467 | 126 | | | | EFSA |
| 05.039 | alpha-Butylcinnamaldehyde | 7492-44-6 | 684 | 127 | | | | EFSA |
| 05.040 | alpha-Pentylcinnamaldehyde | 122-40-7 | 685 | 128 | | | | EFSA |
| 05.041 | alpha-Hexylcinnamaldehyde | 101-86-0 | 686 | 129 | | | | EFSA |
| 05.042 | p-Tolylacetaldehyde | 104-09-6 | 1023 | 130 | | | | EFSA |
| 05.043 | 2-(p-Tolyl)propionaldehyde | 99-72-9 | 1471 | 131 | | | | EFSA |
| 05.044 | p-Isopropyl phenylacetaldehyde | 4395-92-0 | 1024 | 132 | | | | EFSA |
| 05.045 | 3-(p-Cumenyl)-2-methylpropionaldehyde | 103-95-7 | 1465 | 133 | At least 90%; secondary component 5% 3-(p-cumenyl)-2-methylpropionic acid | | | EFSA |
| 05.046 | 2-Methyl-4-phenylbutyraldehyde | 40654-82-8 | 1462 | 134 | | | | EFSA |
| 05.047 | 4-Hydroxybenzaldehyde | 123-08-0 | 956 | 558 | | | | EFSA |
| 05.048 | 2-Methoxycinnamaldehyde | 1504-74-1 | 688 | 571 | At least 94%; secondary component 3% o-methoxycinnamic acid | | | EFSA |
| 05.049 | 2-Methylbutyraldehyde | 96-17-3 | 254 | 575 | | | | JECFA |
| 05.050 | alpha-Methylcinnamaldehyde | 101-39-3 | 683 | 578 | | | | EFSA |
| 05.051 | 3-(4-Methoxyphenyl)-2-methylprop-2-enal | 65405-67-6 | 689 | 584 | | | | EFSA |
| 05.052 | 2-Methyl-3-(p-tolyl)propionaldehyde | 41496-43-9 | 1466 | 587 | | | | EFSA |
| 05.053 | 2,4,6-Trimethyl-1,3,5-trioxane | 123-63-7 | | 594 | | | | SCF/CoE |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.055 | Salicylaldehyde | 90-02-8 | 897 | 605 | | | | EFSA |
| 05.056 | 4-Ethoxybenzaldehyde | 10031-82-0 | 879 | 626 | | | | EFSA |
| 05.057 | Hexa-2(trans),4(trans)-dienal | 142-83-6 | 1175 | 640 | | | 2 | EFSA |
| 05.058 | Nona-2(trans),6(cis)-dienal | 557-48-2 | 1186 | 659 | At least 92%; secondary component 4-7% (E,E)-2,6-nonadienal | | 2 | EFSA |
| 05.059 | Non-6(cis)-enal | 2277-19-2 | 325 | 661 | At least 90%; secondary component 6-9% trans-6-nonenal | | | JECFA |
| 05.060 | Oct-2-enal | 2363-89-5 | 1363 | 663 | At least 92%; secondary components 3-4% 2-octenoic acid and ethyl octanoate | | 2 | EFSA |
| 05.061 | Oct-6-enal | 63826-25-5 | | 664 | | | | EFSA |
| 05.062 | 2-Phenylcrotonaldehyde | 4411-89-6 | 1474 | 670 | | | 2 | EFSA |
| 05.064 | Trideca-2(trans),4(cis),7(cis)-trienal | 13552-96-0 | 1198 | 685 | At least 71%; secondary components 14% 4-cis-7-cis-tridecadienol; 6% 3-cis-7-cis-tridecadienol; 5% 2-trans-7-cis-tridecadienal; 3% 2-trans-4-trans-7-cis-tridecatrienal | | 2 | EFSA |
| 05.066 | 4-Ethoxy-3-methoxybenzaldehyde | 120-25-2 | | 703 | | | | EFSA |
| 05.068 | 4-Ethylbenzaldehyde | 4748-78-1 | 865 | 705 | | | | EFSA |
| 05.069 | 2-Methylpentanal | 123-15-9 | 260 | 706 | | | | JECFA |
| 05.070 | 2-Heptenal | 2463-63-0 | 1360 | 730 | | | 2 | SCF/CoE |
| 05.071 | Nona-2,4-dienal | 6750-03-4 | 1185 | 732 | At least 89%; secondary components 5-6% 2,4-nonadien-1-ol and 1-2% 2-nonen-1-ol | | 2 | EFSA |
| 05.072 | trans-2-Nonenal | 18829-56-6 | | 733 | At least 92%; secondary component 3-4% 2-nonenic acid | | 2 | CoE |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.073 | Hex-2(trans)-enal | 6728-26-3 | 1353 | 748 | At least 92%; secondary component 3-4% 2-hexenoic acid | | 2 | CoE |
| 05.074 | 2,6-Dimethylhept-5-enal | 106-72-9 | 349 | 2006 | At least 85%; secondary components 9-10% 6-methyl-5-hepten-2-one; 1-2% 2,6-dimethyl-6-heptenal | | | JECFA |
| 05.075 | Hex-3(cis)-enal | 6789-80-6 | 316 | 2008 | | | | JECFA |
| 05.076 | Dec-2-enal | 3913-71-1 | 1349 | 2009 | At least 92%; secondary components 3-4% 2-decenoic acid | | 2 | EFSA |
| 05.077 | 2-Methylundecanal | 110-41-8 | 275 | 2010 | | | | JECFA |
| 05.078 | Tridec-2-enal | 7774-82-5 | 1359 | 2011 | At least 92%; secondary components 3-4% 2-tridecenoic acid | | 2 | EFSA |
| 05.079 | Citronellyl oxycetaldehyde | 7492-67-3 | 592 | 2012 | At least 75%; secondary components 20-21% geranyloxyacetaldehyde; 1-2% citronellol | | | EFSA |
| 05.080 | 3-Phenylpropanal | 104-53-0 | 645 | 2013 | | | | EFSA |
| 05.081 | 2,4-Decadienal | 2363-88-4 | | | At least 89%; secondary components mixture of the (cis, cis)-; (cis, trans)- and (trans, cis)- 2,4-decadienals (sum of all isomers 95%); acetone and isopropanol | | 2 | EFSA |
| 05.082 | (Z,Z)-3,6-Dodecadienal | 13553-09-8 | | 2121 | | | | EFSA |
| 05.084 | Hepta-2,4-dienal | 4313-03-5 | 1179 | 729 | At least 92%; secondary components 2-4% (E,Z)-2,4-heptadienal and 2-4% 2,4-heptadienoic acid | | 2 | EFSA |
| 05.085 | Hept-4-enal | 6728-31-0 | 320 | 2124 | | | | JECFA |
| 05.090 | 2-Methylpent-2-enal | 623-36-9 | 1209 | 2129 | At least 92%; secondary components 1.5-2.5% propionaldehyde and 3.5-4.5% propionic acid | | 1 | EFSA |
| 05.091 | 2-Hydroxy-4-methylbenzaldehyde | 698-27-1 | 898 | 2130 | | | | EFSA |
| 05.094 | 3-(4-Isopropylphenyl)propionaldehyde | 7775-00-0 | 680 | 2261 | 85-90% p-isomer and 5-10% o-isomer | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.095 | 2-Methylcrotonaldehyde | 497-03-0 | 1201 | 2281 | | | 1 | EFSA |
| 05.096 | 4-Decenal | 30390-50-2 | 326 | 2297 | | | | JECFA |
| 05.097 | 3-Methyl-2-phenylbutyraldehyde | 2439-44-3 | 1463 | 135 | | | | EFSA |
| 05.098 | p-Menth-1-en-9-al | 29548-14-9 | 971 | 10347 | | | | EFSA |
| 05.099 | 5-Methyl-2-phenylhex-2-enal | 21834-92-4 | 1472 | 10365 | | | 2 | EFSA |
| 05.100 | 4-Methyl-2-phenylpent-2-enal | 26643-91-4 | 1473 | 10366 | | | 2 | EFSA |
| 05.101 | Penta-2,4-dienal | 764-40-9 | 1173 | 11695 | | | 2 | EFSA |
| 05.102 | Pent-2-enal | 764-39-6 | 1364 | 10375 | | | 2 | EFSA |
| 05.103 | 3-Phenylpent-4-enal | 939-21-9 | 679 | 10378 | | | | EFSA |
| 05.104 | 2,6,6-Trimethylcyclohexa-1,3-diene-1-carbaldehyde | 116-26-7 | 977 | 10383 | | | | EFSA |
| 05.105 | 2-Butylbut-2-enal | 25409-08-9 | 1214 | 10324 | | | 1 | EFSA |
| 05.106 | Myrtenal | 564-94-3 | 980 | 10379 | | | 2 | EFSA |
| 05.107 | 2-Isopropyl-5-methylhex-2-enal | 35158-25-9 | 1215 | 10361 | | | 1 | EFSA |
| 05.108 | Undeca-2,4-dienal | 13162-46-4 | 1195 | 10385 | | | 2 | EFSA |
| 05.109 | 2-Undecenal | 2463-77-6 | 1366 | 11827 | | | 2 | EFSA |
| 05.110 | 2,4-Dimethylbenzaldehyde | 15764-16-6 | 869 | | | | | EFSA |
| 05.111 | Octa-2(trans),6(trans)-dienal | 56767-18-1 | 1182 | 10371 | | | 2 | EFSA |
| 05.112 | 2,6,6-Trimethylcyclohex-1-en-1-acetaldehyde | 472-66-2 | 978 | 10338 | At least 92%; secondary components 2-3% beta-cyclocitral; 0.5-1% beta-ionone; 2-4% methyl beta-homocyclogeranate; 0.6-1% ethyl beta-homocyclogeranate | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.113 | Hex-4-enal | 4634-89-3 | 319 | 10337 | | | | JECFA |
| 05.114 | 4-Methylpent-2-enal | 5362-56-1 | 1208 | 10364 | | | 2 | EFSA |
| 05.115 | 2-Phenylpent-4-enal | 24401-36-3 | 1476 | 10377 | | | | EFSA |
| 05.116 | 3,5,5-Trimethylhexanal | 5435-64-3 | 269 | 10384 | | | | JECFA |
| 05.117 | p-Mentha-1,8-dien-7-al | 2111-75-3 | 973 | 11788 | | | 2 | EFSA |
| 05.118 | 4-Methoxycinnamaldehyde | 1963-36-6 | 687 | 11919 | | | | EFSA |
| 05.119 | (1R) 2,2,3-Trimethylcyclopent-3-en-1-yl acetaldehyde | 4501-58-0 | 967 | 10325 | | | | EFSA |
| 05.120 | Dodeca-2,6-dienal | 21662-13-5 | 1197 | | | | 2 | EFSA |
| 05.121 | 2,6,6-Trimethyl-1-cyclohexen-1-carboxaldehyde | 432-25-7 | 979 | 2133 | | | 2 | EFSA |
| 05.122 | p-Methylcinnamaldehyde | 1504-75-2 | 682 | 10352 | | | | EFSA |
| 05.123 | (1R,2R,5S) 5-Isopropenyl-2-methylcyclopentanecarboxaldehyde | 55253-28-6 | 968 | | | | | EFSA |
| 05.124 | 3-Methylcrotonaldehyde | 107-86-8 | 1202 | 10354 | | | | EFSA |
| 05.125 | Dodeca-2,4-dienal | 21662-16-8 | 1196 | 11758 | At least 85%; secondary component 11-12% 2-trans-4-cis isomer | | 2 | EFSA |
| 05.126 | 2-Methyloct-2-enal | 49576-57-0 | 1217 | 10363 | | | 1 | EFSA |
| 05.127 | Octa-2(trans),4(trans)-dienal | 30361-28-5 | 1181 | 11805 | | | 2 | EFSA |
| 05.128 | Oct-5(cis)-enal | 41547-22-2 | 323 | | At least 85%; secondary component 10-15% trans-5-octenal | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.129 | 2-Methoxybenzaldehyde | 135-02-4 | | 10350 | | | | EFSA |
| 05.134 | 2-Methyl-3-tolylpropionaldehyde (mixed o,m,p-) | | | 587 | At least 95% (sum of isomers p-80%; o-10%; m-5%) | | | CoE |
| 05.137 | Dec-4(cis)-enal | 21662-09-9 | | | At least 90%; secondary component at least 5% trans-isomer | | 1 | EFSA |
| 05.139 | Dec-9-enal | 39770-05-3 | 1286 | | | | | EFSA |
| 05.140 | Deca-2(trans),4(trans)-dienal | 25152-84-5 | 1190 | 2120 | At least 89%; secondary components 3-4% mixture of (cis-cis)-; (cis-trans)- and (trans-cis)- 2,4-decadienals; 3-4% acetone and trace of isopropanol | | 2 | EFSA |
| 05.141 | Deca-2,4,7-trienal | 51325-37-2 | 1786 | | | | 2 | EFSA |
| 05.142 | 3,4-Dihydroxybenzaldehyde | 139-85-5 | | 10328 | | | | EFSA |
| 05.143 | 2,5-Dimethyl-2-vinylhex-4-enal | 56134-05-5 | | | | | | EFSA |
| 05.144 | Dodec-2(trans)-enal | 20407-84-5 | | | At least 93%; secondary component 2-3% 2-dodecenoic acid | | 2 | EFSA |
| 05.147 | 2-Ethylhexanal | 123-05-7 | | 10331 | | | | EFSA |
| 05.148 | Farnesal | 19317-11-4 | 1228 | | | | | EFSA |
| 05.149 | Glutaraldehyde | 111-30-8 | | | | | | EFSA |
| 05.150 | Hept-2(trans)-enal | 18829-55-5 | 1360 | 730 | | | 2 | EFSA |
| 05.152 | Hexadecanal | 629-80-1 | | 10336 | | | | EFSA |
| 05.153 | 4-Hydroxy-3,5-dimethoxybenzaldehyde | 134-96-3 | 1878 | 10340 | | | | EFSA |
| 05.154 | (E)-4-Hydroxy-3,5-dimethoxycinnamaldehyde | 4206-58-0 | | 10341 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.155 | 4-Hydroxy-3-methoxycinnamaldehyde (mixture of isomers) | 458-36-6 | | 10342 | | | | EFSA |
| 05.156 | 3-(4-Hydroxy-3-methoxyphenyl)propanal | 80638-48-8 | | | | | | EFSA |
| 05.157 | Isocyclocitral | 1335-66-6 | | | | | | EFSA |
| 05.158 | 3-Methoxybenzaldehyde | 591-31-1 | | 10351 | | | | EFSA |
| 05.159 | p-Methoxyphenylacetaldehyde | 5703-26-4 | | | | | | EFSA |
| 05.160 | 2-Methyldecanal | 19009-56-4 | | | | | | EFSA |
| 05.164 | 2-Methylhexanal | 925-54-2 | | | | | | EFSA |
| 05.166 | 4-Methylpentanal | 1119-16-0 | | 10369 | | | | EFSA |
| 05.167 | 12-Methyltetradecanal | 75853-50-8 | | | | | | EFSA |
| 05.169 | 12-Methyltridecanal | 75853-49-5 | 1229 | | | | | EFSA |
| 05.170 | Neral | 106-26-3 | | | | | 1 | EFSA |
| 05.171 | Non-2-enal | 2463-53-8 | 1362 | 733 | At least 92%; secondary component 3-4% 2-nonenic acid | | 2 | EFSA |
| 05.172 | Nona-2(trans),6(trans)-dienal | 17587-33-6 | 1187 | | | | 2 | EFSA |
| 05.173 | Nona-2,4,6-trienal | 57018-53-8 | 1785 | | | | 2 | EFSA |
| 05.174 | Pent-4-enal | 2100-17-6 | 1619 | | | | | EFSA |
| 05.175 | 2-Phenylpent-2-enal | 3491-63-2 | | | | | 2 | EFSA |
| 05.179 | (E)-Tetradec-2-enal | 51534-36-2 | 1803 | | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.182 | 2,6,6-Trimethylcyclohex-2-ene-1-carboxaldehyde | 432-24-6 | | | | | 1 | EFSA |
| 05.183 | 4-(2,6,6-Trimethylcyclohexenyl)-2-methylbutanal | 73398-85-3 | | | | | | EFSA |
| 05.184 | Undec-2(trans)-enal | 53448-07-0 | | | | | 2 | EFSA |
| 05.186 | 2,4-Octadienal | 5577-44-6 | | | | | 2 | EFSA |
| 05.188 | trans-3,7-Dimethylocta-2,6-dienal | 141-27-5 | | | | | 1 | EFSA |
| 05.189 | 2-Hexenal | 505-57-7 | | | At least 92%; secondary component 3-4% 2-hexenoic acid | | 2 | EFSA |
| 05.190 | trans-2-Octenal | 2548-87-0 | | | At least 92%; secondary components 3-4% 2-octenoic acid and ethyl octanoate | | 2 | EFSA |
| 05.191 | trans-2-Decenal | 3913-81-3 | | | At least 92%; secondary component 3-4% 2-decenoic acid | | 2 | EFSA |
| 05.192 | 3-Hexenal | 4440-65-7 | 1271 | | At least 80% (total of cis- and trans-isomers); secondary component 18-20% trans-2-hexenal. | | | EFSA |
| 05.194 | tr-2, tr-4-Nonadienal | 5910-87-2 | | | At least 89%; secondary components at least 5% 2,4-nonadien-1-ol and 2-nonen-1-ol and other isomers of 2,4-nonadienal | | 2 | EFSA |
| 05.195 | trans-2-Tridecenal | 7069-41-2 | | | At least 92%; secondary components 2-5% 2-tridecenoic acid and 3-5% cis-2-tridecenal | | 2 | EFSA |
| 05.196 | tr-2, tr-4-Undecadienal | 30361-29-6 | | 10385 | | | 2 | EFSA |
| 05.198 | 3-Butenal, 2-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)- | 58102-02-6 | | | | | | EFSA |
| 05.203 | 9-Octadecenal | 5090-41-5 | 1641 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
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| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 05.208 | Z-8-Tetradecenal | 169054-69-7 | 1640 | | | | | EFSA |
| 05.211 | 6-Methyloctanal | 30689-75-9 | | | | | | EFSA |
| 05.217 | (Z)-5-Decenal | 21662-08-8 | | | | | | EFSA |
| 05.218 | 16-Octadecenal | 56554-87-1 | | | | | | EFSA |
| 05.219 | 3-Methylhexanal | 19269-28-4 | | | | | | EFSA |
| 05.220 | 4Z-Dodecenal | 21944-98-9 | 1636 | | At least 94% of (4Z)-dodecenal; secondary component 3-4% dodecanal | | | EFSA |
| 05.221 | 6,6'-Dihydroxy-5,5'-dimethoxy-biphenyl-3,3'-dicarbaldehyde | 2092-49-1 | 1881 | | | | | EFSA |
| 05.222 | 2-Phenyl-4-methyl-2-hexenal | 26643-92-5 | | | | | 2 | EFSA |
| 05.223 | 4-Ethyloctanal | 58475-04-0 | 1819 | | | | | EFSA |
| 05.224 | (4E)-hexenal | 25166-87-4 | 1622 | | | | | EFSA |
| 05.225 | 6-Methylheptanal | 63885-09-6 | | | | | | EFSA |
| 05.226 | E-4-Undecenal | 68820-35-9 | | | | | | EFSA |
| 06.001 | 1,1-Diethoxyethane | 105-57-7 | 941 | 35 | | | | EFSA |
| 06.002 | 5-Hydroxy-2-phenyl-1,3-dioxane | 1708-40-3 | 838 | 36 | At least 98% (sum of 5-hydroxy-2-phenyl-1,3-dioxane and 2-phenyl-4-hydroxymethyl-1,3-dioxalane) | | | EFSA |
| 06.003 | alpha,alpha-Dimethoxytoluene | 1125-88-8 | 837 | 37 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 06.004 | Citral diethyl acetal | 7492-66-2 | 948 | 38 | At least 98% (sum of isomers + hemiacetals + citral) | | | EFSA |
| 06.005 | Citral dimethyl acetal | 7549-37-3 | 944 | 39 | At least 98% (sum of isomers + hemiacetals + citral) | | | EFSA |
| 06.006 | 1,1-Dimethoxy-2-phenylethane | 101-48-4 | 1003 | 40 | | | | EFSA |
| 06.007 | Phenylacetaldehyde glyceryl acetal | 29895-73-6 | 1004 | 41 | 57% 5-hydroxymethyl-2-phenyl-1,3-dioxolan; 38% 5-hydroxy-2-phenyl-1,3-dioxan | | | EFSA |
| 06.008 | 1,1-Dimethoxyoctane | 10022-28-3 | 942 | 42 | | | | EFSA |
| 06.009 | 1,1-dimethoxydecane | 7779-41-1 | 945 | 43 | | | | EFSA |
| 06.010 | 1,1-Diethoxy-3,7-dimethyloctan-7-ol | 7779-94-4 | 613 | 44 | | | | JECFA |
| 06.011 | 1,1-Dimethoxy-3,7-dimethyloctan-7-ol | 141-92-4 | 612 | 45 | | | | JECFA |
| 06.012 | Tolualdehyde glyceryl acetal | 1333-09-1 | 867 | 46 | 40% 5-hydroxydioxane; 60% 5-hydroxymethyldioxalane | | | EFSA |
| 06.013 | alpha-Pentylcinnamaldehyde dimethyl acetal | 91-87-2 | 681 | 47 | | | | EFSA |
| 06.014 | Cinnamaldehyde ethylene glycol acetal | 5660-60-6 | 648 | 48 | | | | EFSA |
| 06.015 | 1,1-Dimethoxyethane | 534-15-6 | 940 | 510 | | | | EFSA |
| 06.016 | 1-Phenylethoxy-1-propoxy ethane | 7493-57-4 | 1000 | 511 | | | | EFSA |
| 06.017 | (Diethoxymethyl)benzene | 774-48-1 | | 517 | | | | EFSA |
| 06.019 | 1-Benzyloxy-1-(2-methoxyethoxy)ethane | 7492-39-9 | 840 | 523 | | | | EFSA |
| 06.020 | 1,1-Diethoxydecane | 34764-02-8 | | 531 | | | | SCF/CoE |
| 06.021 | 1,1-Diethoxyheptane | 688-82-4 | | 553 | | | | SCF/CoE |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|--------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 06.023 | 1,1-Diethoxyhexane | 3658-93-3 | | 557 | | | | SCF/CoE |
| 06.024 | 1,1-Di-isobutoxy-2-phenylethane | 68345-22-2 | 1006 | 595 | | | | EFSA |
| 06.025 | 1,1-Diethoxynona-2,6-diene | 67674-36-6 | 946 | 660 | | | 2 | EFSA |
| 06.027 | 4,5-Dimethyl-2-benzyl-1,3-dioxolan | 5468-06-4 | 1005 | 669 | At least 93%; secondary component 2-3% butane-2,3-diol | | | EFSA |
| 06.028 | 1,1-Dimethoxyheptane | 10032-05-0 | 947 | 2015 | | | | EFSA |
| 06.029 | Heptanal glyceryl acetal (mixed 1,2 and 1,3 acetals) | 72854-42-3 | 912 | 2016 | Mixture of acetals (56-58% dioxolane; 37-39% dioxane) and 1-2% unreacted heptanal | | | EFSA |
| 06.030 | 1,1-Dimethoxy-2-phenylpropane | 90-87-9 | 1468 | 2017 | | | | EFSA |
| 06.031 | 1,1-Diethoxyhex-2-ene | 54306-00-2 | 1383 | 2135 | | | 2 | EFSA |
| 06.032 | 4-Methyl-2-phenyl-1,3-dioxolane | 2568-25-4 | 839 | 2226 | | | | EFSA |
| 06.033 | 1,1-Dibutoxyethane | 871-22-7 | | 2341 | | | | SCF/CoE |
| 06.034 | 1,1-Dipropoxyethane | 105-82-8 | | 2342 | | | | SCF/CoE |
| 06.035 | Citral propylene glycol acetal | 10444-50-5 | | 2343 | | | | SCF/CoE |
| 06.036 | 1-Butoxy-1-(2-phenylethoxy)ethane | 64577-91-9 | 1001 | 10007 | | | | EFSA |
| 06.037 | 1,1-Diethoxyhept-4-ene (cis and trans) | 1192738-48-9 | 949 | 10011 | | | | EFSA |
| 06.038 | 4,4-Dimethoxybutan-2-one | 5436-21-5 | 593 | 10029 | | | | JECFA |
| 06.039 | 1,2-Di((1'-ethoxy)-ethoxy)propane | 67715-79-1 | 927 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 06.040 | 1,2,3-Tris([1'-ethoxy]-ethoxy)propane | 67715-82-6 | 913 | 11930 | | | | EFSA |
| 06.041 | 1-Isobutoxy-1-ethoxy-2-methylpropane | | | 10055 | | | | EFSA |
| 06.042 | 1-Isobutoxy-1-ethoxy-3-methylbutane | 85136-40-9 | | 10057 | | | | EFSA |
| 06.043 | 1-Isoamyloxy-1-ethoxypropane | 238757-30-7 | | 10038 | | | | EFSA |
| 06.044 | 1-Isobutoxy-1-ethoxypropane | 67234-04-2 | | 10058 | | | | EFSA |
| 06.045 | 1-Isobutoxy-1-isopentyloxy-2-methylpropane | | | 10061 | | | | EFSA |
| 06.046 | 1-Isobutoxy-1-isopentyloxy-3-methylbutane | | | 10060 | | | | EFSA |
| 06.047 | 1-Isopentyloxy-1-propoxyethane | 238757-63-6 | | 10065 | | | | EFSA |
| 06.048 | 1-Isopentyloxy-1-propoxypropane | 238757-65-8 | | 10066 | | | | EFSA |
| 06.049 | 1-Butoxy-1-(2-methylbutoxy)ethane | 77249-20-8 | | | | | | EFSA |
| 06.050 | 1-Butoxy-1-ethoxyethane | 57006-87-8 | | 10003 | | | | EFSA |
| 06.051 | 1,1-Di-(2-methylbutoxy)ethane | 13535-43-8 | | | | | | EFSA |
| 06.052 | 1,1-Di-isobutoxy-2-methylpropane | 13262-24-3 | | 10025 | | | | EFSA |
| 06.053 | 1,1-Di-isobutoxyethane | 5669-09-0 | | 10023 | | | | EFSA |
| 06.054 | 1,1-Di-isobutoxypentane | 13262-27-6 | | 10026 | | | | EFSA |
| 06.055 | 1,1-Di-isopentyloxyethane | 13002-09-0 | 1729 | 10028 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 06.057 | 1,1-Diethoxy-2-methylbutane | 3658-94-4 | | 10013 | | | | EFSA |
| 06.058 | 1,1-Diethoxy-2-methylpropane | 1741-41-9 | | 10015 | | | | EFSA |
| 06.059 | 1,1-Diethoxy-3-methylbutane | 3842-03-3 | 1730 | 10014 | | | | EFSA |
| 06.061 | 1,1-Diethoxybutane | 3658-95-5 | | 10009 | | | | EFSA |
| 06.062 | 1,1-Diethoxydodecane | 53405-98-4 | | | | | | EFSA |
| 06.063 | (Z)-1,1-diethoxyhex-3-ene | 73545-18-3 | | | | | | EFSA |
| 06.064 | Diethoxymethane | 462-95-3 | | 10012 | | | | EFSA |
| 06.065 | 1,1-Diethoxynonane | 54815-13-3 | | 10016 | | | | EFSA |
| 06.066 | 1,1-Diethoxyoctane | 54889-48-4 | | | | | | EFSA |
| 06.067 | 1,1-Diethoxypentane | 3658-79-5 | | 10017 | | | | EFSA |
| 06.069 | 1,1-Diethoxypropane | 4744-08-5 | | 10018 | | | | EFSA |
| 06.070 | 1,1-Diethoxyundecane | 53405-97-3 | | | | | | EFSA |
| 06.071 | 1,1-Dihexyloxyethane | 5405-58-3 | | 10022 | | | | EFSA |
| 06.072 | 1,1-Dimethoxyhex-2(trans)-ene | 18318-83-7 | 1728 | | | | 2 | EFSA |
| 06.073 | 1,1-Dimethoxyhexane | 1599-47-9 | | | | | | EFSA |
| 06.074 | Dimethoxymethane | 109-87-5 | | 10031 | | | | EFSA |
| 06.075 | 1,1-Dimethoxypentane | 26450-58-8 | | | | | | EFSA |
| 06.076 | 1,1-Dimethoxypropane | 4744-10-9 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 06.077 | 2,4-Dimethyl-1,3-dioxolane | 3390-12-3 | 1711 | | | | | EFSA |
| 06.078 | 1,1-Diphenethoxyethane | 122-71-4 | | | | | | EFSA |
| 06.079 | 1-Ethoxy-1-(2-methylbutoxy)ethane | 13602-09-0 | | 10040 | | | | EFSA |
| 06.080 | 1-Ethoxy-1-(2-phenylethoxy)ethane | 2556-10-7 | | 10049 | | | | EFSA |
| 06.081 | (Z)-1-Ethoxy-1-(3-hexenyloxy)ethane | 28069-74-1 | 943 | 10034 | | | | EFSA |
| 06.082 | 1-Ethoxy-1-hexyloxyethane | 54484-73-0 | | 11948 | | | | EFSA |
| 06.083 | 1-Ethoxy-1-isopentyloxyethane | 13442-90-5 | | 10037 | | | | EFSA |
| 06.084 | 1-Ethoxy-1-methoxyethane | 10471-14-4 | | 10039 | | | | EFSA |
| 06.085 | 1-Ethoxy-1-pentyloxyethane | 13442-89-2 | | 10046 | | | | EFSA |
| 06.086 | 1-Ethoxy-1-propoxyethane | 20680-10-8 | | 10050 | | | | EFSA |
| 06.087 | Ethyl 2,4-dimethyl-1,3-dioxolane-2-acetate | 6290-17-1 | 1715 | | | | | EFSA |
| 06.088 | 2-Ethyl-4-methyl-1,3-dioxolane | 4359-46-0 | | | | | | EFSA |
| 06.089 | 2-Hexyl-4,5-dimethyl-1,3-dioxolane | 6454-22-4 | 1712 | | | | | EFSA |
| 06.090 | 4-Hydroxymethyl-2-methyl-1,3-dioxolane | 3773-93-1 | | | | | | EFSA |
| 06.091 | 1-Isobutoxy-1-ethoxyethane | 6986-51-2 | | 10054 | | | | EFSA |
| 06.092 | 1-Isobutoxy-1-isopentyloxyethane | 75048-15-6 | | 10059 | | | | EFSA |
| 06.094 | 4-Methyl-2-pentyl-1,3-dioxolane | 1599-49-1 | 928 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 06.095 | 4-Methyl-2-propyl-1,3-dioxolane | 4352-99-2 | | | | | | EFSA |
| 06.096 | Triethoxymethane | 122-51-0 | | 10903 | | | | EFSA |
| 06.097 | 1,1,3-Triethoxypropane | 7789-92-6 | | 10075 | | | | EFSA |
| 06.098 | 2,2,4-Trimethyl-1,3-dioxolane | 1193-11-9 | 929 | 11423 | | | | EFSA |
| 06.100 | 1,1-Dipentyloxyethane | 13002-08-9 | | 10032 | | | | EFSA |
| 06.102 | 2-Hexyl-5-hydroxy-1,3-dioxane | 1708-36-7 | | 2016 | | | | EFSA |
| 06.104 | Vanillin propylene glycol acetal | 68527-74-2 | 1882 | | | | | EFSA |
| 06.105 | 3-Methyl-1,1-di-isopentyloxybutane | 13285-51-3 | | 10070 | | | | EFSA |
| 06.106 | 2-Methyl-1,1-di-isopentyloxypropane | 13112-63-5 | | 10071 | | | | EFSA |
| 06.107 | 1-(2-Methylbutoxy)-1-isopentyloxyethane | 13548-84-0 | | 10068 | | | | EFSA |
| 06.109 | 8,8-Diethoxy-2,6-dimethyloct-2-ene | 71662-17-4 | | | | | | EFSA |
| 06.111 | 1-Ethoxy-1-methoxypropane | 127248-84-4 | | | | | | EFSA |
| 06.114 | 1-Hexyloxy-1-isopentyloxyethane | 233665-90-2 | | | | | | EFSA |
| 06.115 | 1-isopentyloxy-1-pentyloxyethane | 13442-92-7 | | | | | | EFSA |
| 06.120 | DL-Menthone-1,2-glycerol ketal | 63187-91-7 | 446 | | | | | JECFA |
| 06.123 | 1-Butoxy-1-isopentyloxyethane | 238757-27-2 | | 10004 | | | | EFSA |
| 06.124 | 1,1-Di-isobutoxy-3-methylbutane | 13439-98-0 | | 10024 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 06.125 | 1,1-Di-isobutoxypropane | 13002-11-4 | | 10027 | | | | EFSA |
| 06.128 | 1-Ethoxy-1-pentyloxybutane | 3658-92-2 | | 10045 | | | | EFSA |
| 06.129 | 1-Ethoxy-2-methyl-1-isopentyloxypropane | 253679-74-2 | | 10043 | | | | EFSA |
| 06.130 | 1-Ethoxy-2-methyl-1-propoxypropane | 238757-42-1 | | 10044 | | | | EFSA |
| 06.131 | 1-Ethoxy-1-(3-methylbutoxy)-3-methylbutane | 238757-35-2 | | 10042 | | | | EFSA |
| 06.132 | Vanillin butan-2,3-diol acetal (mixture of stereo isomers) | 63253-24-7 | 960 | | | | | EFSA |
| 06.133 | 1-Menthone-1,2-glycerol ketal | 563187-91-7 | 445 | | | | | JECFA |
| 06.135 | 2-Isobutyl-4-methyl-1,3-dioxolane | 18433-93-7 | 1732 | | | | | EFSA |
| 06.136 | 6-Isopropyl-3,9-dimethyl-1,4-dioxyspiro[4.5]decan-2-one | 831213-72-0 | 1859 | | Sum of isomers 98% with at least 60-70% (3S,5R,6S,9R)-6-isopropyl-3,9-dimethyl-1,4-dioxyspiro[4.5]decan-2-one. | | | EFSA |
| 06.137 | Acetaldehyde ethyl isopropyl acetal | 25334-93-4 | | | | | | EFSA |
| 07.001 | 2-Oxopropanal | 78-98-8 | 937 | 105 | | | | EFSA |
| 07.002 | Heptan-2-one | 110-43-0 | 283 | 136 | | | | JECFA |
| 07.003 | Heptan-3-one | 106-35-4 | 285 | 137 | | | | JECFA |
| 07.004 | Acetophenone | 98-86-2 | 806 | 138 | | | | EFSA |
| 07.005 | Vanillyl acetone | 122-48-5 | 730 | 139 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.007 | alpha-Ionone | 127-41-3 | 388 | 141 | | | 2 | JECFA/ EFSA |
| 07.008 | beta-Ionone | 14901-07-6 | 389 | 142 | | | 2 | JECFA/EFSA |
| 07.009 | Methyl-alpha-ionone | 7779-30-8 | 398 | 143 | At least 90%; secondary component 5-6% methyl-beta-ionone | | 2 | JECFA/ EFSA |
| 07.010 | Methyl-beta- ionone | 127-43-5 | 399 | 144 | At least 88%; secondary component 7-10% alpha- and beta-isomethylionone | | 2 | JECFA/ EFSA |
| 07.011 | 4-(2,5,6,6-Tetramethyl-2-cyclohexenyl)-3-buten-2-one | 79-69-6 | 403 | 145 | | | 2 | JECFA/ EFSA |
| 07.012 | Carvone | 99-49-0 | 380 | 146 | | | | SCF/CoE |
| 07.013 | Methyl 2-naphthyl ketone | 93-08-3 | 811 | 147 | | | | EFSA |
| 07.014 | Maltol | 118-71-8 | 1480 | 148 | | | 2 | EFSA |
| 07.015 | 6-Methylhept-5-en-2-one | 110-93-0 | 1120 | 149 | | | | EFSA |
| 07.016 | Undecan-2-one | 112-12-9 | 296 | 150 | | | | JECFA |
| 07.017 | 4-Methylpentan-2-one | 108-10-1 | 301 | 151 | | | | JECFA |
| 07.018 | Hexan-2,3-dione | 3848-24-6 | 412 | 152 | At least 93%; secondary components 2-3% hexanediones | | | JECFA |
| 07.019 | Octan-2-one | 111-13-7 | 288 | 153 | | | | JECFA |
| 07.020 | Nonan-2-one | 821-55-6 | 292 | 154 | | | | JECFA |
| 07.021 | Undeca-2,3-dione | 7493-59-6 | 417 | 155 | | | | JECFA |
| 07.022 | 4-Methylacetophenone | 122-00-9 | 807 | 156 | | | | EFSA |
| 07.023 | 2,4-Dimethylacetophenone | 89-74-7 | 809 | 157 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.024 | 4-Phenylbut-3-en-2-one | 122-57-6 | 820 | 158 | | | 2 | EFSA |
| 07.025 | 4-Methyl-1-phenylpentan-2-one | 5349-62-2 | 828 | 159 | | | | EFSA |
| 07.026 | 4-(p-Tolyl)butan-2-one | 7774-79-0 | 817 | 160 | | | | EFSA |
| 07.027 | 3-Methyl-4-phenylbut-3-en-2-one | 1901-26-4 | 821 | 161 | | | 2 | EFSA |
| 07.028 | Benzoin | 119-53-9 | 836 | 162 | | | | EFSA |
| 07.029 | 4-(4-Methoxyphenyl)butan-2-one | 104-20-1 | 818 | 163 | | | | EFSA |
| 07.030 | 1-(4-Methoxyphenyl)pent-1-en-3-one | 104-27-8 | 826 | 164 | | | 2 | EFSA |
| 07.031 | Piperonyl acetone | 55418-52-5 | | 165 | | | | SCF/CoE |
| 07.032 | Benzophenone | 119-61-9 | 831 | 166 | | | | EFSA |
| 07.033 | Isojasmone | 11050-62-7 | 1115 | 167 | | | 2 | EFSA |
| 07.034 | 2-Hexylidenecyclopentan-1-one | 17373-89-6 | 1106 | | | | | EFSA |
| 07.035 | Tetramethyl ethylcyclohexenone (mixture of isomers) | 17369-60-7 | 1111 | 168 | | | | EFSA |
| 07.036 | alpha-Isomethyl ionone | 127-51-5 | 404 | 169 | | | 2 | JECFA |
| 07.038 | 4-Methoxyacetophenone | 100-06-1 | 810 | 570 | | | | EFSA |
| 07.040 | 1-Phenylpropan-1-one | 93-55-0 | 824 | 599 | | | | EFSA |
| 07.041 | beta-Isomethyl ionone | 79-89-0 | | 650 | | | 2 | EFSA |
| 07.042 | 4-Isopropylacetophenone | 645-13-6 | 808 | 651 | | | | EFSA |
| 07.044 | Pent-3-en-2-one | 625-33-2 | 1124 | 666 | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.045 | 2,2,6-Trimethylcyclohexanone | 2408-37-9 | 1108 | 686 | | | | EFSA |
| 07.046 | Vanillylidene acetone | 1080-12-2 | 732 | 691 | | | 2 | EFSA |
| 07.047 | Ethyl maltol | 4940-11-8 | 1481 | 692 | | | | EFSA |
| 07.048 | 4-Hexen-3-one | 2497-21-4 | 1125 | 718 | | | 1 | EFSA |
| 07.049 | 1-(4-Methoxyphenyl)-4-methylpent-1-en-3-one | 103-13-9 | 829 | 719 | | | 2 | EFSA |
| 07.050 | Acetone | 67-64-1 | 139 | 737 | | | | JECFA |
| 07.051 | 3-Hydroxybutan-2-one | 513-86-0 | 405 | 749 | | | | JECFA |
| 07.052 | Diacetyl | 431-03-8 | 408 | 752 | | | | JECFA |
| 07.053 | Butan-2-one | 78-93-3 | 278 | 753 | | | | JECFA |
| 07.054 | Pentan-2-one | 107-87-9 | 279 | 754 | | | | JECFA |
| 07.055 | 4-(p-Hydroxyphenyl)butan-2-one | 5471-51-2 | 728 | 755 | | | | EFSA |
| 07.056 | 3-Methylcyclopentan-1,2-dione | 80-71-7 | 418 | 758 | | | | JECFA |
| 07.057 | 3-Ethylcyclopentan-1,2-dione | 21835-01-8 | 419 | 759 | At least 90%; secondary component 5-10% 3-ethylcyclopentan-1,2-dione (enolic form) | | | JECFA |
| 07.058 | Heptan-4-one | 123-19-3 | 287 | 2034 | | | | JECFA |
| 07.059 | p-Menthan-3-one | 10458-14-7 | | | | | 1 | EFSA |
| 07.060 | Pentan-2,3-dione | 600-14-6 | 410 | 2039 | At least 93%; secondary component 2-3% 2,5-diethylcyclohexadien-1,4-dione (dimer of 2,3-pentadione) | | | JECFA |
| 07.061 | Allyl alpha-ionone | 79-78-7 | 401 | 2040 | | | 2 | JECFA/EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
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| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.062 | Octan-3-one | 106-68-3 | 290 | 2042 | | | | JECFA |
| 07.063 | 4-Methylpentan-2,3-dione | 7493-58-5 | 411 | 2043 | | | | JECFA |
| 07.064 | Heptan-2,3-dione | 96-04-8 | 415 | 2044 | | | | JECFA |
| 07.065 | 5-Hydroxyoctan-4-one | 496-77-5 | 416 | 2045 | | | | JECFA |
| 07.067 | 2R,5S-isopulegone | 29606-79-9 | 754 | 2051 | | | 4 | EFSA |
| 07.069 | Tetrahydro-pseudo-ionone | 4433-36-7 | 1121 | 2053 | | | | EFSA |
| 07.070 | 3-Benzylheptan-4-one | 7492-37-7 | 830 | 2140 | | | | EFSA |
| 07.071 | Octane-4,5-dione | 5455-24-3 | | 2141 | | | | EFSA |
| 07.072 | 6-Methylheptan-3-one | 624-42-0 | | 2143 | | | | EFSA |
| 07.075 | 3,4-Dimethylcyclopentan-1,2-dione | 13494-06-9 | 420 | 2234 | | | | JECFA |
| 07.076 | 3,5-Dimethylcyclopentan-1,2-dione | 13494-07-0 | 421 | 2235 | | | | JECFA |
| 07.077 | Hexan-3,4-dione | 4437-51-8 | 413 | 2255 | | | | JECFA |
| 07.078 | d,l-Isomenthone | 491-07-6 | 430 | 2259 | | | | JECFA |
| 07.079 | 1-Phenylpropan-1,2-dione | 579-07-7 | 833 | 2275 | | | | EFSA |
| 07.080 | 3-Methylcyclohexan-1,2-dione | 3008-43-3 | 425 | 2311 | | | | JECFA |
| 07.081 | Oct-1-en-3-one | 4312-99-6 | 1148 | 2312 | | | 1 | EFSA |
| 07.082 | Oct-2-en-4-one | 4643-27-0 | 1129 | 2313 | | | 1 | EFSA |
| 07.083 | beta-Damascone | 23726-92-3 | 384 | 2340 | At least 90%; secondary components 5-8% alpha- and delta-damascone | | 2 | JECFA/EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.084 | Pentan-3-one | 96-22-0 | | 2350 | | | | EFSA |
| 07.086 | 1,3-Diphenylpropan-2-one | 102-04-5 | 832 | 11839 | | | | EFSA |
| 07.087 | 4-Methoxyphenylacetone | 122-84-9 | 813 | 11836 | | | | EFSA |
| 07.088 | Methyl-delta-ionone | 7784-98-7 | 400 | 11852 | | | 2 | JECFA/EFSA |
| 07.089 | Nootkatone | 4674-50-4 | 1398 | 11164 | At least 93%; secondary component 3-4% dihydronootkatone | | 2 | EFSA |
| 07.090 | 1-Hydroxybutan-2-one | 5077-67-8 | 1717 | 11102 | | | | EFSA |
| 07.091 | gamma-Ionone | 79-76-5 | 390 | | | | 2 | JECFA/EFSA |
| 07.092 | p-Menthan-2-one | 499-70-7 | 375 | 11128 | | | | JECFA |
| 07.093 | 5-Methylhexan-2,3-dione | 13706-86-0 | 414 | 11148 | | | | JECFA |
| 07.094 | 3-Methyl-2-(pent-2(cis-enyl)cyclopent-2-en-1-one | 488-10-8 | 1114 | 11786 | | | 2 | EFSA |
| 07.095 | 2-(sec-Butyl)cyclohexanone | 14765-30-1 | 1109 | 11044 | At least 94%; secondary component 2-2.5% 2-isobutyl cyclohexanone | | | EFSA |
| 07.096 | Hexan-3-one | 589-38-8 | 281 | 11097 | | | | JECFA |
| 07.097 | 3-(Hydroxymethyl)octan-2-one | 59191-78-5 | 1839 | 11113 | At least 90%; secondary component 7% 3-methylene-2-octanone | | | EFSA |
| 07.098 | 3-Methylcyclohex-2-en-1-one | 1193-18-6 | 1107 | 11134 | | | | EFSA |
| 07.099 | 6-Methylhepta-3,5-dien-2-one | 1604-28-0 | 1134 | 11143 | | | 1 | EFSA |
| 07.100 | 5-Methylhex-5-en-2-one | 3240-09-3 | 1119 | 11150 | | | | EFSA |
| 07.101 | 4-Methylpent-3-en-2-one | 141-79-7 | 1131 | 11853 | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.102 | Pent-1-en-3-one | 1629-58-9 | 1147 | 11179 | | | 1 | EFSA |
| 07.103 | Tridecan-2-one | 593-08-8 | 298 | 11194 | | | | JECFA |
| 07.104 | Hept-2-en-4-one | 4643-25-8 | 1126 | 11093 | | | 1 | EFSA |
| 07.105 | Hept-3-en-2-one | 1119-44-4 | 1127 | 11094 | | | 1 | EFSA |
| 07.106 | 5-Methylhex-3-en-2-one | 5166-53-0 | 1132 | 11149 | | | 1 | EFSA |
| 07.107 | Oct-3-en-2-one | 1669-44-9 | 1128 | 11170 | At least 94%; secondary component 4-6% 4-octen-2-one | | 1 | EFSA |
| 07.108 | beta-Damascenone | 23696-85-7 | 387 | 11197 | | | 2 | JECFA/ EFSA |
| 07.109 | 2,6,6-Trimethylcyclohex-2-en-1,4-dione | 1125-21-9 | 1857 | 11200 | | | 2 | EFSA |
| 07.112 | 3-Methyl-2-cyclopenten-1-one | 2758-18-1 | 1105 | 11137 | | | 2 | EFSA |
| 07.113 | Nonan-3-one | 925-78-0 | 294 | 11160 | | | | JECFA |
| 07.114 | 6,10,14-Trimethylpentadeca-5,9,13-trien-2-one | 762-29-8 | 1123 | 11206 | | | | EFSA |
| 07.115 | 3,4-Dehydrodihydro-beta-ionone | 20483-36-7 | 396 | 11057 | At least 70%; secondary component 25-27% tetrahydroionone | | | JECFA |
| 07.117 | 3-Ethyl-2-hydroxy-4-methylcyclopent-2-en-1-one | 42348-12-9 | 422 | 11077 | | | | JECFA |
| 07.118 | 5-Ethyl-2-hydroxy-3-methylcyclopent-2-en-1-one | 53263-58-4 | 423 | 11078 | | | | JECFA |
| 07.119 | 2-Hydroxycyclohex-2-en-1-one | 10316-66-2 | 424 | 11046 | | | | JECFA |
| 07.120 | 2-Hydroxy-3,5,5-trimethylcyclohex-2-en-1-one | 4883-60-7 | 426 | 11198 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|--|---------------------|----------|-------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.121 | Dec-3-en-2-one | 10519-33-2 | 1130 | 11751 | | | 1 | EFSA |
| 07.122 | 2,6-Dimethylheptan-4-one | 108-83-8 | 302 | 11914 | At least 80%; secondary component 15-17% 4,6-dimethyl-2-heptanone | | | JECFA |
| 07.123 | Geranylacetone | 3796-70-1 | 1122 | 11088 | | | | EFSA |
| 07.124 | 2-Hydroxyacetophenone | 118-93-4 | 727 | 11784 | | | | EFSA |
| 07.125 | 3-Hydroxypentan-2-one | 3142-66-3 | 409 | 11115 | | | | JECFA |
| 07.126 | 3,5,5-Trimethylcyclohex-2-en-1-one | 78-59-1 | 1112 | 11918 | | | | EFSA |
| 07.127 | p-Mentha-1,4(8)-dien-3-one | 491-09-8 | 757 | 11189 | | | 2 | EFSA |
| 07.128 | Dihydrocarvone | 7764-50-3 | 377 | 11703 | At least 77%; secondary components 10-15% dihydrocarveol; 5-6% carvone; 2-3% carveol | | | JECFA |
| 07.129 | 3-Methyl-5-propylcyclohex-2-en-1-one | 3720-16-9 | 1113 | | | | | EFSA |
| 07.130 | delta-Damascone | 57378-68-4 | 386 | | | | 2 | JECFA/ EFSA |
| 07.131 | Dihydro-beta-ionone | 17283-81-7 | 394 | 11060 | | | | JECFA |
| 07.132 | Dihydro-alpha-ionone | 31499-72-6 | 393 | 11059 | | | | JECFA |
| 07.134 | alpha-Damascone | 43052-87-5 | 385 | 11053 | | | 2 | JECFA/EFSA |
| 07.135 | 2,4-Dihydroxyacetophenone | 28631-86-9 | 729 | 11884 | 23-25% 2,3-isomer; 19-22% 2,4-isomer; 19-20% 2,5-isomer; 20-21% 3,4-isomer and 15-18% 3,5-isomer | | | EFSA |
| 07.136 | 4,4a,5,6-Tetrahydro-7-methylnaphthalen-2(3H)-one | 34545-88-5 | 1405 | | | | 2 | EFSA |
| 07.137 | Pentadecan-2-one | 2345-28-0 | 299 | 11808 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.139 | 5-Methylhept-2-en-4-one | 81925-81-7 | 1133 | | | | 1 | EFSA |
| 07.140 | 3-Methyl-2-pentylcyclopent-2-en-1-one | 1128-08-1 | 1406 | | | | 2 | EFSA |
| 07.142 | Acetovanillone | 498-02-2 | | 11035 | | | | EFSA |
| 07.146 | d-Carvone | 2244-16-8 | 380.1 | | | | | JECFA |
| 07.147 | l-Carvone | 6485-40-1 | 380.2 | | | | | JECFA |
| 07.148 | Cyclohexanone | 108-94-1 | 1100 | 11047 | | | | EFSA |
| 07.149 | Cyclopentanone | 120-92-3 | 1101 | 11050 | | | | EFSA |
| 07.150 | Decan-2-one | 693-54-9 | | 11055 | | | | EFSA |
| 07.151 | Decan-3-one | 928-80-3 | 1118 | 11056 | | | | EFSA |
| 07.152 | 3,3-Diethoxybutan-2-one | 51933-13-2 | | | | | | EFSA |
| 07.153 | (4R,4aS,6R,8aS)-1,10-Dihydronootkatone | 20489-53-6 | 1407 | | At least 90%; secondary component 5-6% nootkatone | | | EFSA |
| 07.154 | 1-(3,5-Dimethoxy-4-hydroxyphenyl)propan-1-one | 5650-43-1 | | 11106 | | | | EFSA |
| 07.156 | 2,6-Dimethyloct-6-en-3-one (mixture of E and Z) | 90975-15-8 | | | | | | EFSA |
| 07.157 | 6,10-Dimethylundecan-2-one | 1604-34-8 | | 11068 | | | | EFSA |
| 07.158 | Dodecan-2-one | 6175-49-1 | | 11069 | | | | EFSA |
| 07.159 | d-Fenchone | 4695-62-9 | 1396 | 551 | | | | EFSA |
| 07.160 | Heptadecan-2-one | 2922-51-2 | | 11089 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.161 | Hex-1-en-3-one | 1629-60-3 | | | | | 1 | EFSA |
| 07.162 | Hex-5-en-2-one | 109-49-9 | | | | | | EFSA |
| 07.164 | 4-Hydroxy-3,5-dimethoxyacetophenone | 2478-38-8 | | 11105 | | | | EFSA |
| 07.165 | 4-Hydroxy-4-methylpentan-2-one | 123-42-2 | | | | | | EFSA |
| 07.167 | 4-Hydroxyhexan-3-one | 4984-85-4 | | 11108 | | | | EFSA |
| 07.168 | 2-Hydroxypiperitone | 490-03-9 | | | | | | EFSA |
| 07.169 | 1-Hydroxypropan-2-one | 116-09-6 | | 11101 | | | | EFSA |
| 07.170 | beta-Ionone epoxide | 23267-57-4 | 1571 | 11202 | | | 2 | EFSA |
| 07.171 | Isopinocampone | 18358-53-7 | 1868 | 11125 | | | | EFSA |
| 07.172 | 4-Isopropylcyclohex-2-en-1-one | 500-02-7 | 1110 | 11127 | | | | EFSA |
| 07.175 | p-Menth-1-en-3-one | 89-81-6 | 435 | 2052 | At least 94%; secondary components 2-3% menthol and menthone | | | JECFA |
| 07.176 | trans-Menthone | 89-80-5 | 429 | 2035 | | | | JECFA |
| 07.177 | 7-Methyl-3-octenone-2 | 33046-81-0 | 1135 | | At least 94%; secondary components 2-4% 7-methyl-4-octen-2-one, 5,6-dimethyl-3-hepten-2one and 3-nonen-2-one | | 1 | EFSA |
| 07.178 | 3-Methylbutan-2-one | 563-80-4 | | 11131 | | | | EFSA |
| 07.179 | 2-Methylcyclohexanone | 583-60-8 | 1102 | | | | | EFSA |
| 07.180 | 3-Methylcyclohexanone | 591-24-2 | 1103 | | | | | EFSA |
| 07.181 | 6-Methylheptan-2-one | 928-68-7 | | 11146 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.182 | 5-Methylheptan-3-one | 541-85-5 | | | | | | EFSA |
| 07.184 | 3-Methylnona-2,4-dione | 113486-29-6 | 2032 | | | | 4 | JECFA/EFSA |
| 07.185 | 3-Methylpentan-2-one | 565-61-7 | | 11157 | | | | EFSA |
| 07.187 | Non-2-en-4-one | 32064-72-5 | | 11162 | | | 1 | EFSA |
| 07.188 | Non-3-en-2-one | 14309-57-0 | 1136 | 11163 | | | 1 | EFSA |
| 07.189 | Nonan-4-one | 4485-09-0 | | 11161 | | | | EFSA |
| 07.190 | Octa-1,5-dien-3-one | 65213-86-7 | 1848 | | | | 1 | EFSA |
| 07.193 | 1-Phenylbutan-1-one | 495-40-9 | | | | | | EFSA |
| 07.194 | 4-Phenylbutan-2-one | 2550-26-7 | | 11182 | | | | EFSA |
| 07.195 | 1-Phenylpropan-2-one | 103-79-7 | | 11042 | | | | EFSA |
| 07.196 | Pin-2-en-4-one | 80-57-9 | 1870 | 11186 | | | | EFSA |
| 07.198 | Pseudo-ionone | 141-10-6 | | 11191 | | | 1 | EFSA |
| 07.199 | Tetradecan-2-one | 2345-27-9 | | 11192 | | | | EFSA |
| 07.200 | 4-(2,5,6,6-Tetramethyl-1-cyclohexenyl)but-3-en-2-one | 79-70-9 | | | | | 2 | EFSA |
| 07.201 | Tridec-12-en-2-one | 60437-21-0 | | | | | | EFSA |
| 07.202 | 2,6,6-Trimethylcyclohex-2-en-1-one | 20013-73-4 | | | | | 1 | EFSA |
| 07.203 | 3,3,5-Trimethylcyclohexan-1-one | 873-94-9 | | | | | | EFSA |
| 07.204 | 3,3,6-Trimethylhepta-1,5-dien-4-one | 546-49-6 | | | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|--|---|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.205 | 6,10,14-Trimethylpentadecan-2-one | 502-69-2 | | 11205 | | | | EFSA |
| 07.206 | 4-(2,3,6-Trimethylphenyl)but-3-en-2-one | 56681-06-2 | | | | | 2 | EFSA |
| 07.210 | 1-Nonene-3-one | 24415-26-7 | | | | | 1 | EFSA |
| 07.214 | alpha-Methyl naphthyl ketone | 941-98-0 | | | | | | EFSA |
| 07.215 | d-Camphor | 464-49-3 | 1395 | 140 | | In category 1 – not more than 16 mg/kg In categories 2 and 8 – not more than 50 mg/kg In category 3 – not more than 20 mg/kg In categories 5, 6, 7, 12 and 15 – not more than 100 mg/kg In category 14.1 – not more than 50 mg/l In category 14.2 – not more than 50 mg/l (except not more than 850 mg/l in <i>Schweden-bitter</i>) | | EFSA |
| 07.219 | trans-3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one | 6261-18-3 | | | | | 2 | EFSA |
| 07.224 | tr-1-(2,6,6-Trimethyl-1-cyclohexen-1-yl)but-2-en-1-one | 23726-91-2 | | | At least 90%; secondary components 2-4% alpha-damascone and 2-4% delta-damascone | | 2 | EFSA |
| 07.225 | cis-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one | 23726-94-5 | | | At least 92%; secondary component 4% trans-isomer | | 2 | EFSA |
| 07.226 | trans-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one | 24720-09-0 | | | | | 2 | EFSA |
| 07.231 | alpha-Damascenone | 35044-63-4 | | | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.234 | 1-(4-Hydroxy-3-methoxyphenyl)-3-decanone | 27113-22-0 | 2021 | | | | | EFSA |
| 07.236 | (Z)-5-Octen-2-one | 22610-86-2 | | 11171 | | | | EFSA |
| 07.238 | 3-Hydroxy-2-octanone | 37160-77-3 | | | | | | EFSA |
| 07.239 | [R-(E)]-5-Isopropyl-8-methylnona-6,8-dien-2-one | 2278-53-7 | 1840 | | | | | EFSA |
| 07.240 | 2-Methylheptan-3-one | 13019-20-0 | 1156 | | | | | EFSA |
| 07.242 | 3-Hydroxy-4-phenylbutane-2-one | 5355-63-5 | 2041 | | At least 93%; secondary component 3-5% 4-hydroxy-4-phenylbutan-2-one | | | EFSA |
| 07.243 | 4-Hydroxyacetophenone | 99-93-4 | | | | | | EFSA |
| 07.244 | (6E)-Methyl-3-hepten-2-one | 20859-10-3 | 1138 | | | | 1 | EFSA |
| 07.247 | (E,E)-3,5-Octadien-2-one | 30086-02-3 | 1139 | | | | 1 | EFSA |
| 07.248 | Octan-2,3-dione | 585-25-1 | | | | | | EFSA |
| 07.249 | Undecan-6-one | 927-49-1 | 1155 | | | | | EFSA |
| 07.254 | 2-Methoxyacetophenone | 579-74-8 | | | | | | EFSA |
| 07.255 | l-Piperitone | 4573-50-6 | 1856 | | | | 1 | EFSA |
| 07.256 | (E) & (Z)-4,8-Dimethyl-3,7-nonadiene-2-one | 817-88-9 | 1137 | | At least 94%; secondary component 3-4% 4,8-dimethyl-3,7-nonadien-2-ol | | 1 | EFSA |
| 07.257 | 2-(3,7-Dimethyl-2,6-octadienyl)cyclopentanone | 68133-79-9 | 1117 | | | | | EFSA |
| 07.258 | 6-Methyl-3-hepten-2-one | 2009-74-7 | | | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 07.259 | 2-Methyl-acetophenone | 577-16-2 | 2044 | | | | | EFSA |
| 07.260 | 3-Hydroxy-5-methyl-2-hexanone | 163038-04-8 | | | | | | EFSA |
| 07.261 | 4-Methyl-3-hepten-5-one | 22319-31-9 | | | | | 1 | EFSA |
| 07.262 | 9-decen-2-one | 35194-30-0 | | | | | | EFSA |
| 08.001 | Formic acid | 64-18-6 | 79 | 1 | | | | JECFA |
| 08.002 | Acetic acid | 64-19-7 | 81 | 2 | | | | JECFA |
| 08.003 | Propionic acid | 79-09-4 | 84 | 3 | | | | JECFA |
| 08.004 | Lactic acid | 598-82-3 | 930 | 4 | | | | EFSA |
| 08.005 | Butyric acid | 107-92-6 | 87 | 5 | | | | JECFA |
| 08.006 | 2-Methylpropionic acid | 79-31-2 | 253 | 6 | | | | JECFA |
| 08.007 | Valeric acid | 109-52-4 | 90 | 7 | | | | JECFA |
| 08.008 | 3-Methylbutyric acid | 503-74-2 | 259 | 8 | | | | JECFA |
| 08.009 | Hexanoic acid | 142-62-1 | 93 | 9 | | | | JECFA |
| 08.010 | Octanoic acid | 124-07-2 | 99 | 10 | | | | JECFA |
| 08.011 | Decanoic acid | 334-48-5 | 105 | 11 | | | | JECFA |
| 08.012 | Dodecanoic acid | 143-07-7 | 111 | 12 | At least 90%; secondary components 3-6% tetradecanoic acid; 2-5% decanoic acid; 1-2% hexadecanoic acid | | | JECFA |
| 08.013 | Oleic acid | 112-80-1 | 333 | 13 | At least 90%; secondary component 5-7% palmitic acid and other fatty acids | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------|-----------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 08.014 | Hexadecanoic acid | 57-10-3 | 115 | 14 | At least 80%; secondary components 8-11% octadecanoic acid; 5-7% tetradecanoic acid; 3-5% heptadecanoic acid; <1% pentadecanoic acid | | | JECFA |
| 08.015 | Octadecanoic acid | 57-11-4 | 116 | 15 | At least 40%; secondary components 5-50% hexadecanoic acid; <3% tetradecanoic acid; <5% 9-octadecenoic acid; <3% heptadecanoic acid; <2% eicosanoic acid; <1% pentadecanoic acid | | | JECFA |
| 08.016 | Tetradecanoic acid | 544-63-8 | 113 | 16 | At least 94%; secondary components 2-4% hexadecanoic acid; 1-3% dodecanoic acid | | | JECFA |
| 08.017 | l-Malic acid | 6915-15-7 | 619 | 17 | | | | JECFA |
| 08.018 | Tartaric acid | 133-37-9 | 621 | 18 | | | | JECFA |
| 08.019 | Pyruvic acid | 127-17-3 | 936 | 19 | | | | EFSA |
| 08.021 | Benzoic acid | 65-85-0 | 850 | 21 | | | | EFSA |
| 08.022 | Cinnamic acid | 621-82-9 | 657 | 22 | | | | EFSA |
| 08.023 | 4-Oxovaleric acid | 123-76-2 | 606 | 23 | | | | JECFA |
| 08.024 | Succinic acid | 110-15-6 | | 24 | | | | CoE |
| 08.025 | Fumaric acid | 110-17-8 | 618 | 25 | | | | JECFA |
| 08.026 | Adipic acid | 124-04-9 | 623 | 26 | | | | JECFA |
| 08.028 | Heptanoic acid | 111-14-8 | 96 | 28 | | | | JECFA |
| 08.029 | Nonanoic acid | 112-05-0 | 102 | 29 | | | | JECFA |
| 08.031 | 2-Methylvaleric acid | 97-61-0 | 261 | 31 | | | | JECFA |
| 08.032 | 3-Phenylpropionic acid | 501-52-0 | 646 | 32 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 08.033 | Prop-1-ene-1,2,3-tricarboxylic acid | 499-12-7 | 627 | 33 | | | | JECFA |
| 08.034 | Cyclohexylacetic acid | 5292-21-7 | 965 | 34 | | | | EFSA |
| 08.035 | 2-Methylhexanoic acid | 4536-23-6 | 265 | 582 | | | | JECFA |
| 08.036 | Citronellic acid | 502-47-6 | 1221 | 616 | At least 90%; secondary components 5-8% citronellal, citronellyl, neryl, and geranyl acetate esters and other naturally occurring terpenes | | | EFSA |
| 08.037 | 2-Oxoglutaric acid | 328-50-7 | 634 | 653 | | | | JECFA |
| 08.038 | Phenylacetic acid | 103-82-2 | 1007 | 672 | | | | EFSA |
| 08.039 | Undec-10-enoic acid | 112-38-9 | 331 | 689 | | | | JECFA |
| 08.040 | 4-Hydroxybenzoic acid | 99-96-7 | 957 | 693 | | | | EFSA |
| 08.041 | Octadeca-9,12-dienoic acid | 60-33-3 | 332 | 694 | 44-46% linolenic acid; 18-20% linoleic acid; 22-25% stearic and oleic acid; 7-8% palmitic acid | | | JECFA |
| 08.042 | Undecanoic acid | 112-37-8 | 108 | 696 | | | | JECFA |
| 08.043 | Vanillic acid | 121-34-6 | 959 | 697 | | | | EFSA |
| 08.044 | (2E),4-Dimethylpent-2-enoic acid | 21016-46-6 | 1211 | 744 | At least 92%; secondary component 5-7% 4-methyl-2-methylenevaleric acid. | | | EFSA |
| 08.045 | 2-Ethylbutyric acid | 88-09-5 | 257 | 2001 | | | | JECFA |
| 08.046 | 2-Methylbutyric acid | 116-53-0 | 255 | 2002 | | | | JECFA |
| 08.047 | 2-Methylheptanoic acid | 1188-02-9 | 1212 | 2003 | | | | EFSA |
| 08.048 | Pent-4-enoic acid | 591-80-0 | 314 | 2004 | | | | JECFA |
| 08.049 | Phenoxyacetic acid | 122-59-8 | 1026 | 2005 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 08.050 | Hex-3-enoic acid | 4219-24-3 | 317 | 2256 | | | | JECFA |
| 08.051 | 3-Methyl-2-oxobutyric acid | 759-05-7 | 631 | 2262 | | | | JECFA |
| 08.052 | 4-Methyl-2-oxovaleric acid | 816-66-0 | 633 | 2263 | | | | JECFA |
| 08.053 | Malonic acid | 141-82-2 | | 2264 | | | | EFSA |
| 08.054 | Hex-2(trans)-enoic acid | 13419-69-7 | 1361 | 11777 | | | | EFSA |
| 08.055 | 2-Methyl-2-pentenoic acid | 3142-72-1 | 1210 | 11680 | | | | EFSA |
| 08.056 | 3-Methylvaleric acid | 105-43-1 | 262 | 10149 | | | | JECFA |
| 08.057 | 4-Methylvaleric acid | 646-07-1 | 264 | 10150 | | | | JECFA |
| 08.058 | 2-Methylpent-3-enoic acid | 37674-63-8 | 347 | 10147 | | | | JECFA |
| 08.059 | 2-Methylpent-4-enoic acid | 1575-74-2 | 355 | 10148 | | | | JECFA |
| 08.060 | Cyclohexanecarboxylic acid | 98-89-5 | 961 | 11911 | | | | EFSA |
| 08.061 | 5-Methylhexanoic acid | 628-46-6 | 266 | 10142 | | | | JECFA |
| 08.062 | 4-Methylnonanoic acid | 45019-28-1 | 274 | 11925 | | | | JECFA |
| 08.063 | 4-Methyloctanoic acid | 54947-74-9 | 271 | 11926 | | | | JECFA |
| 08.064 | (2E)-Methylcrotonic acid | 80-59-1 | 1205 | 10168 | | | | EFSA |
| 08.065 | Dec-9-enoic acid | 14436-32-9 | 328 | 10090 | | | | JECFA |
| 08.066 | 2-Oxobutyric acid | 600-18-0 | 589 | | | | | JECFA |
| 08.067 | 1,2,5,6-Tetrahydrocuminic acid | 71298-42-5 | 976 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 08.068 | Dec-(5- and 6)-enoic acid | 72881-27-7 | 327 | | | | | JECFA |
| 08.070 | 3-Methylcrotonic acid | 541-47-9 | 1204 | 10138 | | | | EFSA |
| 08.071 | p-Anisic acid | 100-09-4 | 883 | 10077 | | | | EFSA |
| 08.072 | But-2-enoic acid (cis and trans) | 3724-65-0 | | 10080 | | | | EFSA |
| 08.073 | Dec-2-enoic acid | 3913-85-7 | 1372 | 10087 | | | | EFSA |
| 08.074 | Dec-3-enoic acid | 15469-77-9 | | 10088 | | | | EFSA |
| 08.075 | Dec-4-enoic acid | 26303-90-2 | 1287 | 10089 | | | | EFSA |
| 08.076 | 2,4-Dihydroxybenzoic acid | 89-86-1 | 908 | | | | | EFSA |
| 08.078 | 2-Ethylhexanoic acid | 149-57-5 | | | | | | EFSA |
| 08.079 | 4-Ethyl-octanoic acid | 16493-80-4 | 1218 | | | | | EFSA |
| 08.080 | Gallic acid | 149-91-7 | | 10170 | | | | EFSA |
| 08.081 | Geranic acid | 459-80-3 | 1825 | 10094 | | | | EFSA |
| 08.082 | Glutaric acid | 110-94-1 | | | | | | EFSA |
| 08.083 | Hept-2-enoic acid | 18999-28-5 | | 10102 | | | | EFSA |
| 08.085 | (E,E)-Hexa-2,4-dienoic acid | 110-44-1 | 1176 | | | | | EFSA |
| 08.086 | 3-Hydroxy-2-oxopropionic acid | 1113-60-6 | 635 | | | | | JECFA |
| 08.087 | 4-Hydroxy-3,5-dimethoxybenzoic acid | 530-57-4 | | 10111 | | | | EFSA |
| 08.088 | 4-Hydroxy-3,5-dimethoxycinnamic acid (mixture of isomers) | 530-59-6 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 08.089 | 4-Hydroxy-3-methoxycinnamic acid (mixture of isomers) | 1135-24-6 | | 10113 | | | | EFSA |
| 08.090 | 2-Hydroxy-4-methylvaleric acid | 498-36-2 | | 10118 | | | | EFSA |
| 08.092 | 3-Methoxybenzoic acid | 586-38-9 | 882 | | | | | EFSA |
| 08.093 | 3-Methyl-2-oxovaleric acid | 39748-49-7 | 632 | 10146 | | | | JECFA |
| 08.094 | 4-Methyldecanoic acid | 24323-24-8 | | | | | | EFSA |
| 08.095 | 8-Methyldecanoic acid | 5601-60-5 | | | | | | EFSA |
| 08.096 | 3-Methylhexanoic acid | 3780-58-3 | | | | | | EFSA |
| 08.097 | 4-Methylhexanoic acid | 1561-11-1 | | | | | | EFSA |
| 08.099 | 4-Methylpent-2-enoic acid | 10321-71-8 | 1818 | | | | | EFSA |
| 08.100 | 4-Methylpent-3-enoic acid | 504-85-8 | | | | | | EFSA |
| 08.101 | Non-2-enoic acid | 3760-11-0 | | 10153 | | | | EFSA |
| 08.102 | Non-3-enoic acid | 4124-88-3 | | 10154 | | | | EFSA |
| 08.103 | Nonanedioic acid | 123-99-9 | | 10079 | | | | EFSA |
| 08.107 | (E)-Pent-2-enoic acid | 13991-37-2 | 1804 | 10163 | | | | EFSA |
| 08.108 | 2-Phenylpropionic acid | 492-37-5 | | 10164 | | | | EFSA |
| 08.109 | 3-Phenylpyruvic acid | 156-06-9 | 1478 | | | | | EFSA |
| 08.112 | Salicylic acid | 69-72-7 | 958 | 10165 | | | | EFSA |
| 08.113 | Succinic acid, disodium salt | 150-90-3 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 08.114 | 2-Octenoic acid | 1871-67-6 | 1805 | 10156 | | | | EFSA |
| 08.115 | 4-Methylheptanoic acid | 3302-03-2 | | | | | | EFSA |
| 08.119 | 2-Hexenoic acid | 1191-04-4 | | 11777 | | | | EFSA |
| 08.120 | 2-Methyl-2-butenic acid | 13201-46-2 | | 10168 | | | | EFSA |
| 08.123 | trans-2-Heptenoic acid | 10352-88-2 | 1373 | | | | | EFSA |
| 08.127 | 2-(4-Methoxyphenoxy)propionic acid | 158833-38-6 | | | | | | EFSA |
| 08.131 | cis-2-Heptyl-cyclopropanecarboxylic acid | 697290-76-9 | 1907 | | | | | EFSA |
| 08.132 | 3-Hydroxybenzoic acid | 99-06-9 | | | | | | EFSA |
| 08.133 | 3,4-Dihydroxybenzoic acid | 99-50-3 | | | | | | EFSA |
| 08.134 | 4-Hydroxy-3-methoxy-mandelic acid | 55-10-7 | | | | | | EFSA |
| 08.135 | 4-(2,2,3-trimethylcyclopentyl)butanoic acid | 957136-80-0 | | | | | | EFSA |
| 09.001 | Ethyl acetate | 141-78-6 | 27 | 191 | | | | JECFA |
| 09.002 | Propyl acetate | 109-60-4 | 126 | 192 | | | | JECFA |
| 09.003 | Isopropyl acetate | 108-21-4 | 305 | 193 | | | | JECFA |
| 09.004 | Butyl acetate | 123-86-4 | 127 | 194 | | | | JECFA |
| 09.005 | Isobutyl acetate | 110-19-0 | 137 | 195 | | | | JECFA |
| 09.006 | Hexyl acetate | 142-92-7 | 128 | 196 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.007 | Octyl acetate | 112-14-1 | 130 | 197 | | | | JECFA |
| 09.008 | Nonyl acetate | 143-13-5 | 131 | 198 | | | | JECFA |
| 09.009 | Decyl acetate | 112-17-4 | 132 | 199 | | | | JECFA |
| 09.010 | Dodecyl acetate | 112-66-3 | 133 | 200 | | | | JECFA |
| 09.011 | Geranyl acetate | 105-87-3 | 58 | 201 | At least 90%; secondary components 4-6% geraniol and 1-2% nerol | | | JECFA |
| 09.012 | Citronellyl acetate | 150-84-5 | 57 | 202 | At least 92%; secondary component 4-6% citronellol | | | JECFA |
| 09.013 | Linalyl acetate | 115-95-7 | 359 | 203 | | | | JECFA |
| 09.014 | Benzyl acetate | 140-11-4 | 23 | 204 | | | | EFSA |
| 09.015 | alpha-Terpinyl acetate | 80-26-2 | 368 | 205 | | | | SCF/CoE |
| 09.016 | Menthyl acetate | 29066-34-0 | 431 | 206 | | | | JECFA |
| 09.017 | DL-Bornyl acetate | 76-49-3 | 1387 | 207 | | | | EFSA |
| 09.018 | Cinnamyl acetate | 103-54-8 | 650 | 208 | | | | EFSA |
| 09.019 | p-Anisyl acetate | 104-21-2 | 873 | 209 | | | | EFSA |
| 09.020 | Eugenyl acetate | 93-28-7 | 1531 | 210 | | | | EFSA |
| 09.021 | Pentyl acetate | 628-63-7 | | 211 | | | | SCF/CoE |
| 09.022 | Heptyl acetate | 112-06-1 | 129 | 212 | | | | JECFA |
| 09.023 | Methyl acetate | 79-20-9 | 125 | 213 | | | | JECFA |
| 09.024 | Isopentyl acetate | 123-92-2 | 43 | 214 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.025 | 2-Ethylbutyl acetate | 10031-87-5 | 140 | 215 | | | | JECFA |
| 09.026 | alpha-Pentylcinnamyl acetate | 7493-78-9 | 677 | 216 | | | | EFSA |
| 09.027 | Cyclohexyl acetate | 622-45-7 | 1093 | 217 | | | | EFSA |
| 09.028 | 2-Cyclohexylethyl acetate | 21722-83-8 | 964 | 218 | | | | EFSA |
| 09.029 | 1,1-Dimethyl-3-phenylpropyl acetate | 103-07-1 | 1460 | 219 | | | | EFSA |
| 09.030 | 2-Methoxy-4-(prop-1-enyl)phenyl acetate | 93-29-8 | 1262 | 220 | | | | EFSA |
| 09.031 | Phenethyl acetate | 103-45-7 | 989 | 221 | | | | EFSA |
| 09.032 | 3-Phenylpropyl acetate | 122-72-5 | 638 | 222 | | | | EFSA |
| 09.033 | Rhodinyl acetate | 141-11-7 | 60 | 223 | At least 87%; secondary component 9-12% rhodinol | | | JECFA |
| 09.034 | Santalyl acetate | 1323-00-8 | 985 | 224 | | | 2 | EFSA |
| 09.035 | Vanillyl acetate | 881-68-5 | 890 | 225 | | | | EFSA |
| 09.036 | p-Tolyl acetate | 140-39-6 | 699 | 226 | | | | EFSA |
| 09.037 | Ethyl acrylate | 140-88-5 | 1351 | 245 | | | | EFSA |
| 09.038 | Methyl butyrate | 623-42-7 | 149 | 263 | | | | JECFA |
| 09.039 | Ethyl butyrate | 105-54-4 | 29 | 264 | | | | JECFA |
| 09.040 | Propyl butyrate | 105-66-8 | 150 | 266 | | | | JECFA |
| 09.041 | Isopropyl butyrate | 638-11-9 | 307 | 267 | | | | JECFA |
| 09.042 | Butyl butyrate | 109-21-7 | 151 | 268 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.043 | Isobutyl butyrate | 539-90-2 | 158 | 269 | | | | JECFA |
| 09.044 | Pentyl butyrate | 540-18-1 | 152 | 270 | | | | JECFA |
| 09.045 | Hexyl butyrate | 2639-63-6 | 153 | 271 | | | | JECFA |
| 09.046 | Octyl butyrate | 110-39-4 | 155 | 272 | | | | JECFA |
| 09.047 | Decyl butyrate | 5454-09-1 | 156 | 273 | | | | JECFA |
| 09.048 | Geranyl butyrate | 106-29-6 | 66 | 274 | At least 92%; secondary components 3-5% geraniol and 1% nerol | | | JECFA |
| 09.049 | Citronellyl butyrate | 141-16-2 | 65 | 275 | At least 90%; secondary component 6-8% citronellol | | | JECFA |
| 09.050 | Linalyl butyrate | 78-36-4 | 361 | 276 | | | | JECFA |
| 09.051 | Benzyl butyrate | 103-37-7 | 843 | 277 | | | | EFSA |
| 09.052 | Terpinyl butyrate | 2153-28-8 | 370 | 278 | | | | JECFA |
| 09.053 | Cinnamyl butyrate | 103-61-7 | 652 | 279 | | | | EFSA |
| 09.054 | Allyl butyrate | 2051-78-7 | 2 | 280 | | | 2 | JECFA |
| 09.055 | 3-Methylbutyl butyrate | 106-27-4 | 45 | 282 | | | | JECFA |
| 09.057 | 2-Phenylpropyl butyrate | 80866-83-7 | 1469 | 285 | | | | EFSA |
| 09.058 | p-Anisyl butyrate | 6963-56-0 | 875 | 286 | | | | EFSA |
| 09.059 | Ethyl decanoate | 110-38-3 | 35 | 309 | | | | JECFA |
| 09.060 | Ethyl hexanoate | 123-66-0 | 31 | 310 | | | | JECFA |
| 09.061 | Propyl hexanoate | 626-77-7 | 161 | 311 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.062 | Isopropyl hexanoate | 2311-46-8 | 308 | 312 | | | | JECFA |
| 09.063 | Butyl hexanoate | 626-82-4 | 162 | 313 | | | | JECFA |
| 09.064 | Isobutyl hexanoate | 105-79-3 | 166 | 314 | | | | JECFA |
| 09.065 | Pentyl hexanoate | 540-07-8 | 163 | 315 | | | | JECFA |
| 09.066 | Hexyl hexanoate | 6378-65-0 | 164 | 316 | | | | JECFA |
| 09.067 | Geranyl hexanoate | 10032-02-7 | 70 | 317 | | | | JECFA |
| 09.068 | Linalyl hexanoate | 7779-23-9 | 364 | 318 | | | | JECFA |
| 09.069 | Methyl hexanoate | 106-70-7 | 1871 | 319 | | | | SCF/CoE |
| 09.070 | 3-Methylbutyl hexanoate | 2198-61-0 | 46 | 320 | | | | JECFA |
| 09.071 | 3-Phenylpropyl hexanoate | 6281-40-9 | 642 | 321 | | | | EFSA |
| 09.072 | Ethyl formate | 109-94-4 | 26 | 339 | | | | JECFA |
| 09.073 | Propyl formate | 110-74-7 | 117 | 340 | At least 94%; secondary component 4-6% propyl alcohol | | | JECFA |
| 09.074 | Heptyl formate | 112-23-2 | 121 | 341 | At least 94%; secondary component 1-5% heptanal | | | JECFA |
| 09.075 | Octyl formate | 112-32-3 | 122 | 342 | | | | JECFA |
| 09.076 | Geranyl formate | 105-86-2 | 54 | 343 | At least 85%; secondary components 8-10% geraniol and 2-4% nerol | | | JECFA |
| 09.077 | Benzyl formate | 104-57-4 | 841 | 344 | | | | EFSA |
| 09.078 | Citronellyl formate | 105-85-1 | 53 | 345 | At least 90%; secondary component 5-10% citronellol | | | JECFA |
| 09.079 | Rhodinyl formate | 141-09-3 | 56 | 346 | At least 85%; secondary component 10-13% rhodinol | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.080 | Linalyl formate | 115-99-1 | 358 | 347 | At least 90%; secondary component 6-8% linalool | | | JECFA |
| 09.081 | alpha-Terpinyl formate | 2153-26-6 | 367 | 348 | | | | JECFA |
| 09.082 | DL-Bornyl formate | 7492-41-3 | 1389 | 349 | | | | EFSA |
| 09.083 | Phenethyl formate | 104-62-1 | 988 | 350 | | | | EFSA |
| 09.084 | 3-Phenylpropyl formate | 104-64-3 | 637 | 351 | | | | EFSA |
| 09.085 | Cinnamyl formate | 104-65-4 | 649 | 352 | | | | EFSA |
| 09.086 | 2-Methyl-1-phenyl-2-propyl formate | 10058-43-2 | 1654 | 353 | At least 93%; secondary component 5-7% alpha,alpha-dimethylphenethyl alcohol | | | EFSA |
| 09.087 | p-Anisyl formate | 122-91-8 | 872 | 354 | At least 90%; secondary component 8% anisyl alcohol | | | EFSA |
| 09.088 | Eugenyl formate | 10031-96-6 | 1530 | 355 | At least 94%; secondary component 2-3% eugenol | | | EFSA |
| 09.089 | Isoeugenyl formate | 7774-96-1 | 1261 | 356 | | | | EFSA |
| 09.090 | alpha-Pentylcinnamyl formate | 7493-79-0 | 676 | 357 | At least 85%; secondary component 10-12% alpha-amylcinnamyl alcohol | | | EFSA |
| 09.091 | Butyl heptanoate | 5454-28-4 | 169 | 363 | | | | JECFA |
| 09.092 | Isobutyl heptanoate | 7779-80-8 | 172 | 364 | | | | JECFA |
| 09.093 | Ethyl heptanoate | 106-30-9 | 32 | 365 | | | | JECFA |
| 09.094 | Octyl heptanoate | 5132-75-2 | 171 | 366 | | | | JECFA |
| 09.095 | Propyl heptanoate | 7778-87-2 | 168 | 367 | | | | JECFA |
| 09.096 | Methyl heptanoate | 106-73-0 | 167 | 368 | | | | JECFA |
| 09.097 | Allyl heptanoate | 142-19-8 | 4 | 369 | | | 2 | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.098 | Pentyl heptanoate | 7493-82-5 | 170 | 370 | At least 93%; secondary component 4-7% n-amyl 2-methylhexanoate | | | JECFA |
| 09.099 | Ethyl dodecanoate | 106-33-2 | 37 | 375 | | | | JECFA |
| 09.100 | Butyl dodecanoate | 106-18-3 | 181 | 376 | | | | JECFA |
| 09.101 | Methyl dodecanoate | 111-82-0 | 180 | 377 | At least 94%; secondary components 3-6% methyl tetradecanoate; 2-5% methyl decanoate; 1-2% methyl hexadecanoate | | | JECFA |
| 09.102 | p-Tolyl dodecanoate | 10024-57-4 | 704 | 378 | At least 90%; secondary components 3-6% p-tolyl tetradecanoate; 2-5% p-tolyl decanoate; 1-2% p-tolyl hexadecanoate | | | EFSA |
| 09.103 | 3-Methylbutyl dodecanoate | 6309-51-9 | 182 | 379 | | | | JECFA |
| 09.104 | Ethyl tetradecanoate | 124-06-1 | 38 | 385 | | | | JECFA |
| 09.105 | Isopropyl tetradecanoate | 110-27-0 | 311 | 386 | | | | JECFA |
| 09.106 | Methyl tetradecanoate | 124-10-7 | 183 | 387 | | | | JECFA |
| 09.107 | Ethyl nonanoate | 123-29-5 | 34 | 388 | | | | JECFA |
| 09.108 | Methyl nonanoate | 1731-84-6 | 179 | 389 | | | | JECFA |
| 09.109 | Allyl nonanoate | 7493-72-3 | 6 | 390 | | | 2 | JECFA |
| 09.110 | 3-Methylbutyl nonanoate | 7779-70-6 | 48 | 391 | | | | JECFA |
| 09.111 | Ethyl octanoate | 106-32-1 | 33 | 392 | | | | JECFA |
| 09.112 | Pentyl octanoate | 638-25-5 | 174 | 393 | | | | JECFA |
| 09.113 | Hexyl octanoate | 1117-55-1 | 175 | 394 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.114 | Octyl octanoate | 2306-88-9 | 177 | 395 | | | | JECFA |
| 09.115 | Nonyl octanoate | 7786-48-3 | 178 | 396 | | | | JECFA |
| 09.116 | Linalyl octanoate | 10024-64-3 | 365 | 397 | At least 93%; secondary components 2-3% linalool and 2-3% octanoic acid | | | JECFA |
| 09.117 | Methyl octanoate | 111-11-5 | 173 | 398 | | | | JECFA |
| 09.118 | Heptyl octanoate | 4265-97-8 | 176 | 399 | | | | JECFA |
| 09.119 | Allyl octanoate | 4230-97-1 | 5 | 400 | | | 2 | JECFA |
| 09.120 | 3-Methylbutyl octanoate | 2035-99-6 | 47 | 401 | | | | JECFA |
| 09.121 | Ethyl propionate | 105-37-3 | 28 | 402 | | | | JECFA |
| 09.122 | Propyl propionate | 106-36-5 | 142 | 403 | | | | JECFA |
| 09.123 | Isopropyl propionate | 637-78-5 | 306 | 404 | | | | JECFA |
| 09.124 | Butyl propionate | 590-01-2 | 143 | 405 | | | | JECFA |
| 09.125 | Isobutyl propionate | 540-42-1 | 148 | 406 | | | | JECFA |
| 09.126 | Octyl propionate | 142-60-9 | 145 | 407 | | | | JECFA |
| 09.127 | Decyl propionate | 5454-19-3 | 146 | 408 | | | | JECFA |
| 09.128 | Geranyl propionate | 105-90-8 | 62 | 409 | At least 92%; secondary components 3-4% geraniol and 1-2% nerol | | | JECFA |
| 09.129 | Citronellyl propionate | 141-14-0 | 61 | 410 | At least 90%; secondary component 5-8% citronellol | | | JECFA |
| 09.130 | Linalyl propionate | 144-39-8 | 360 | 411 | At least 94%; secondary component 2-5% linalool | | | JECFA |
| 09.131 | DL-Isobornyl propionate | 2756-56-1 | 842 | 412 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------|-----------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.132 | Benzyl propionate | 122-63-4 | 651 | 413 | | | | EFSA |
| 09.133 | Cinnamyl propionate | 103-56-0 | 651 | 414 | | | | EFSA |
| 09.134 | Methyl propionate | 554-12-1 | 141 | 415 | | | | JECFA |
| 09.135 | Pentyl propionate | 624-54-4 | | 416 | | | | SCF/CoE |
| 09.136 | 3-Methylbutyl propionate | 105-68-0 | 44 | 417 | | | | JECFA |
| 09.137 | Phenethyl propionate | 122-70-3 | 990 | 418 | | | | EFSA |
| 09.138 | 3-Phenylpropyl propionate | 122-74-7 | 639 | 419 | | | | EFSA |
| 09.139 | Hexyl propionate | 2445-76-3 | 144 | 420 | | | | JECFA |
| 09.140 | Cyclohexyl propionate | 6222-35-1 | 1097 | 421 | | | | EFSA |
| 09.141 | Rhodinyl propionate | 105-89-5 | 64 | 422 | | | | JECFA |
| 09.142 | Terpinyl propionate | 80-27-3 | 369 | 423 | | | | JECFA |
| 09.143 | Carvyl propionate | 97-45-0 | 383 | 424 | | | | JECFA |
| 09.144 | 1-Phenethyl propionate | 120-45-6 | 802 | 425 | | | | EFSA |
| 09.145 | p-Anisyl propionate | 7549-33-9 | 874 | 426 | | | | EFSA |
| 09.146 | Allyl undec-10-enoate | 7493-76-7 | 9 | 441 | | | 2 | JECFA |
| 09.147 | Ethyl valerate | 539-82-2 | 30 | 465 | | | | JECFA |
| 09.148 | Butyl valerate | 591-68-4 | 160 | 466 | | | | JECFA |
| 09.149 | Pentyl valerate | 2173-56-0 | | 467 | | | | SCF/CoE |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.150 | (E)-Geranyl valerate | 10402-47-8 | 1821 | 468 | | | | EFSA |
| 09.151 | Citronellyl valerate | 7540-53-6 | 69 | 469 | At least 85%; secondary component 10-12% rhodinol | | | JECFA |
| 09.152 | Benzyl valerate | 10361-39-4 | | 470 | | | | EFSA |
| 09.153 | DL-Bornyl valerate | 7549-41-9 | 1392 | 471 | | | | EFSA |
| 09.154 | Menthyl valerate | 89-47-4 | 1852 | 472 | | | | EFSA |
| 09.156 | Methyl 2-nonynoate | 111-80-8 | 1356 | 479 | | | | EFSA |
| 09.157 | Ethyl 2-nonynoate | 10031-92-2 | 1352 | 480 | | | | EFSA |
| 09.158 | Methyl 2-octynoate | 111-12-6 | 1357 | 481 | | | | EFSA |
| 09.159 | Pentyl formate | 638-49-3 | 119 | 497 | At least 92%; secondary component 4-8% n-amyl alcohol | | | JECFA |
| 09.160 | Cyclohexyl formate | 4351-54-6 | 1095 | 498 | | | | EFSA |
| 09.161 | Hexyl formate | 629-33-4 | 120 | 499 | | | | JECFA |
| 09.162 | 3-Methylbutyl formate | 110-45-2 | 42 | 500 | At least 92%; secondary component 4-8% isoamyl alcohol | | | JECFA |
| 09.163 | Butyl formate | 592-84-7 | 118 | 501 | | | | JECFA |
| 09.164 | Isobutyl formate | 542-55-2 | 124 | 502 | At least 94%; secondary component 4-6% isobutyl alcohol | | | JECFA |
| 09.165 | Isopropyl formate | 625-55-8 | 304 | 503 | | | | JECFA |
| 09.166 | Heptyl butyrate | 5870-93-9 | 154 | 504 | | | | JECFA |
| 09.167 | Neryl butyrate | 999-40-6 | 67 | 505 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.168 | Phenethyl butyrate | 103-52-6 | 991 | 506 | | | | EFSA |
| 09.169 | Neryl propionate | 105-91-9 | 63 | 509 | | | | JECFA |
| 09.171 | Cedryl acetate | 77-54-3 | | 527 | | | | EFSA |
| 09.174 | 2-Methoxyphenyl acetate | 613-70-7 | 718 | 552 | | | | EFSA |
| 09.176 | DL-Isobornyl formate | 1200-67-5 | 1390 | 565 | | | | EFSA |
| 09.178 | 1-Phenethyl acetate | 93-92-5 | 801 | 573 | | | | EFSA |
| 09.179 | 1-Phenethyl formate | 7775-38-4 | 800 | 574 | | | | EFSA |
| 09.180 | Methyl hexadecanoate | 112-39-0 | | 581 | | | | EFSA |
| 09.181 | Methyl hex-2-enoate | 2396-77-2 | | 583 | | | | EFSA |
| 09.182 | Methyl valerate | 624-24-8 | 159 | 588 | | | | JECFA |
| 09.185 | 2-Oxopropyl acetate | 592-20-1 | | 607 | | | | SCF/CoE |
| 09.186 | sec-Butan-3-onyl acetate | 4906-24-5 | 406 | 608 | | | | JECFA |
| 09.188 | Pentyl decanoate | 5933-87-9 | | 611 | | | | SCF/CoE |
| 09.189 | 1-Phenylpropyl butyrate | 10031-86-4 | 823 | 628 | | | | EFSA |
| 09.191 | Ethyl hex-3-enoate | 2396-83-0 | 335 | | | | | JECFA |
| 09.192 | Ethyl oleate | 111-62-6 | 345 | 633 | | | | JECFA |
| 09.193 | Ethyl hexadecanoate | 628-97-7 | 39 | 634 | | | | JECFA |
| 09.194 | Ethyl (E,E)-hexa-2,4-dienoic acid | 2396-84-1 | 1178 | 635 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|----------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.197 | Hex-3(cis)-enyl acetate | 3681-71-8 | 134 | 644 | | | | JECFA |
| 09.198 | Isopentyl valerate | 2050-09-1 | | 648 | | | | SCF/CoE |
| 09.200 | 1-Methyl-3-phenylpropyl acetate | 10415-88-0 | 816 | 671 | | | | EFSA |
| 09.201 | Phenethyl valerate | 7460-74-4 | | 673 | | | | EFSA |
| 09.202 | Propyl valerate | 141-06-0 | | 679 | | | | SCF/CoE |
| 09.204 | Ethyl octadeca-9,12-dienoate | 544-35-4 | | 711 | | | | SCF/CoE |
| 09.205 | Ethyl octadeca-9,12,15-trienoate | 1191-41-9 | | 712 | | | | SCF/CoE |
| 09.208 | Butyl oleate | 142-77-8 | | 741 | | | | SCF/CoE |
| 09.209 | Butyl octanoate | 589-75-3 | | 742 | | | | SCF/CoE |
| 09.210 | Ethyl octadecanoate | 111-61-5 | 40 | 745 | At least 89%; secondary components 6-7% ethyl palmitate and ethyl esters of other fatty acid | | | JECFA |
| 09.211 | Glyceryl tributyrat | 60-01-5 | 922 | 747 | | | | EFSA |
| 09.212 | Neryl formate | 2142-94-1 | 55 | 2060 | At least 90%, secondary components 4-6% geraniol, 1-3% nerol and formate esters of citronellol, geraniol and rhodinol | | | JECFA |
| 09.213 | Neryl acetate | 141-12-8 | 59 | 2061 | | | | JECFA |
| 09.214 | Undec-10-enyl acetate | 112-19-6 | 136 | 2062 | | | | JECFA |
| 09.215 | Carvyl acetate | 97-42-7 | 382 | 2063 | | | | JECFA |
| 09.216 | Dihydrocarvyl acetate | 20777-49-5 | 379 | 2064 | | | | JECFA |
| 09.218 | DL-Isobornyl acetate | 125-12-2 | 1388 | 2066 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.219 | 1R,2S,5R-isopulegyl acetate | 57576-09-7 | 756 | 2067 | | | 4 | EFSA |
| 09.220 | Piperonyl acetate | 326-61-4 | 894 | 2068 | | | | EFSA |
| 09.225 | 1,3-Nonanediol acetate | 1322-17-4 | 605 | 2075 | | | | JECFA |
| 09.227 | 1,1-Dimethyl-2-phenethyl acetate | 151-05-3 | 1655 | 2077 | | | | EFSA |
| 09.228 | o-Tolyl acetate | 533-18-6 | 698 | 2078 | | | | EFSA |
| 09.230 | Cyclohexyl butyrate | 1551-44-6 | 1094 | 2082 | | | | EFSA |
| 09.231 | 1-Phenethyl butyrate | 3460-44-4 | 803 | 2083 | | | | EFSA |
| 09.232 | 1,1-Dimethyl-2-phenethyl butyrate | 10094-34-5 | 1656 | 2084 | | | | EFSA |
| 09.233 | Allyl propionate | 2408-20-0 | 1 | 2094 | | | | JECFA |
| 09.234 | Methyl non-2-enoate | 111-79-5 | 1813 | 2099 | | | | EFSA |
| 09.235 | Butyl dec-2-enoate | 7492-45-7 | 1348 | 2100 | | | | EFSA |
| 09.236 | Methyl undec-9-enoate | 5760-50-9 | 342 | 2101 | | | | JECFA |
| 09.237 | Ethyl undec-10-enoate | 692-86-4 | 343 | 10634 | | | | JECFA |
| 09.238 | Butyl undec-10-enoate | 109-42-2 | 344 | 2103 | | | | JECFA |
| 09.239 | Methyl 2-undecynoate | 10522-18-6 | 1358 | 2111 | | | | EFSA |
| 09.240 | Hex-3(cis)-enyl formate | 33467-73-1 | 123 | 2153 | | | | JECFA |
| 09.244 | Allyl hexanoate | 123-68-2 | 3 | 2181 | | | 2 | JECFA |
| 09.246 | Butyl octadecanoate | 123-95-5 | 184 | 2189 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.247 | Allyl crotonate | 20474-93-5 | | 2222 | | | 2 | EFSA |
| 09.248 | Ethyl trans-2-butenoate | 623-70-1 | | 2244 | | | | EFSA |
| 09.249 | 1-Methyl-2-phenethyl butyrate | 68922-11-2 | 814 | 2276 | | | | EFSA |
| 09.250 | Isobutyl valerate | 10588-10-0 | | 2303 | | | | SCF/CoE |
| 09.251 | Methyl decanoate | 110-42-9 | | 2304 | | | | SCF/CoE |
| 09.253 | 2-Isopropyl-5-methylphenyl acetate | 528-79-0 | | 2308 | | | | EFSA |
| 09.254 | 3-Octyl acetate | 4864-61-3 | 313 | 2347 | | | | JECFA |
| 09.256 | Propyl nonanoate | 6513-03-7 | | 2351 | | | | SCF/CoE |
| 09.258 | D- Glucose pentaacetate | 3891-59-6 | | | | | | EFSA |
| 09.260 | Ethyl (E,Z)-deca-2,4-dienoate | 3025-30-7 | 1192 | 10574 | | | | EFSA |
| 09.261 | 2-Phenethyl hexanoate | 6290-37-5 | 995 | 10882 | | | | EFSA |
| 09.262 | Phenethyl octanoate | 5457-70-5 | 996 | 10884 | | | | EFSA |
| 09.263 | Glyceryl tripropionate | 139-45-7 | 921 | 10657 | | | | EFSA |
| 09.264 | sec-Butan-3-onyl butyrate | 84642-61-5 | 407 | 10525 | | | | JECFA |
| 09.265 | Ethyl oct-4-enoate | 34495-71-1 | 338 | 10619 | | | | JECFA |
| 09.266 | Hexyl (2E)-butenoate | 19089-92-0 | 1807 | 10688 | | | | EFSA |
| 09.267 | Methyl hex-3-enoate | 2396-78-3 | 334 | 10801 | | | | JECFA |
| 09.268 | Methyl oct-4(cis)-enoate | 21063-71-8 | 337 | 10834 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.269 | Fenchyl acetate | 13851-11-1 | 1399 | 11769 | | | | EFSA |
| 09.270 | Hex-3-enyl butyrate | 16491-36-4 | 157 | 11859 | | | | JECFA |
| 09.271 | Hex-3-enyl hexanoate | 31501-11-8 | 165 | 11779 | | | | JECFA |
| 09.272 | Myrtenyl formate | 72928-52-0 | 983 | 10858 | | | 2 | EFSA |
| 09.273 | Isobutyl crotonate | 589-66-2 | 1206 | 10706 | | | | EFSA |
| 09.274 | Ethyl undecanoate | 627-90-7 | 36 | 10633 | | | | JECFA |
| 09.275 | Hept-3(trans)-enyl acetate | 1576-77-8 | 135 | 10662 | | | | JECFA |
| 09.276 | Oct-2-enyl acetate | 3913-80-2 | 1367 | 11906 | | | 2 | EFSA |
| 09.277 | Oct-2(trans)-enyl butyrate | 84642-60-4 | 1368 | 11907 | | | 2 | EFSA |
| 09.278 | p-Mentha-1,8-dien-7-yl acetate | 15111-96-3 | 975 | 10742 | | | 2 | EFSA |
| 09.280 | Nonane-1,4-diyl diacetate | 67715-81-5 | 609 | 11927 | At least 92%; secondary component 5-8% monoacetate | | | JECFA |
| 09.281 | Oct-1-en-3-yl acetate | 2442-10-6 | 1836 | 11716 | | | 1 | EFSA |
| 09.282 | Oct-1-en-3-yl butyrate | 16491-54-6 | 1837 | | | | 1 | EFSA |
| 09.283 | (E)-Ethyl dec-2-enoate | 7367-88-6 | 1814 | 10577 | | | | EFSA |
| 09.284 | Ethyl dec-4-enoate | 76649-16-6 | 341 | 10578 | | | | JECFA |
| 09.285 | Ethyl oct-2(trans)-enoate | 7367-82-0 | 1812 | 10617 | | | | EFSA |
| 09.286 | 2-Methylbutyl acetate | 624-41-9 | 138 | 10762 | | | | JECFA |
| 09.287 | Propyl deca-2,4-dienoate | 28316-62-3 | | 10889 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.288 | 4-(4-Acetoxyphenyl)butan-2-one | 3572-06-3 | 731 | | At least 93%; secondary component 2-5% ortho-isomer. | | | EFSA |
| 09.289 | alpha-Campholene acetate | 36789-59-0 | 969 | | | | | EFSA |
| 09.290 | Ethyl octa-4,7-dienoate | 69925-33-3 | 339 | | | | | JECFA |
| 09.291 | Hex-3-enyl hex-3-enoate | 61444-38-0 | 336 | | | | | JECFA |
| 09.292 | Hexyl 2-hexenoate | 33855-57-1 | 1810 | | At least 92%; secondary component 6-8% hexyl trans-3-hexenoate | | | EFSA |
| 09.294 | 2-Methylbenzyl acetate | 17373-93-2 | 863 | | At least 98% (sum of o,m,p-isomers) | | | EFSA |
| 09.298 | Methyl non-3-enoate | 13481-87-3 | 340 | | | | | JECFA |
| 09.299 | Methyl oct-2(trans)-enoate | 7367-81-9 | 1811 | 11800 | At least 90%; secondary component 5-6% methyl trans-3-octenoate | | | EFSA |
| 09.300 | Methyl (E,E)-hexa-2,4-dienoic acid | 689-89-4 | 1177 | | | | | EFSA |
| 09.301 | p-Tolyl octanoate | 59558-23-5 | 703 | | | | | EFSA |
| 09.302 | Myrtenyl acetate | 1079-01-2 | 982 | 10887 | | | 2 | EFSA |
| 09.303 | Hept-2-enyl isovalerate | 253596-70-2 | 1799 | 10664 | | | 2 | EFSA |
| 09.304 | sec-Heptyl isovalerate | 238757-71-6 | | 10806 | | | | EFSA |
| 09.305 | beta-Ionyl acetate | 22030-19-9 | 1409 | 10702 | At least 92%; secondary components 2-5% acetic acid and 1-2% beta-ionol | | 2 | EFSA |
| 09.306 | 2-Methoxycinnamyl acetate (mixture of isomers) | 110823-66-0 | | 10752 | | | | EFSA |
| 09.307 | 2-Methylbutyl dodecanoate | 93815-53-3 | | 10766 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------|-------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.312 | Allyl hexa-2,4-dienoate | 7493-75-6 | 8 | 2182 | | | 2 | JECFA/EFSA |
| 09.313 | Benzyl 2-methylbutyrate | 56423-40-6 | | 10523 | | | | EFSA |
| 09.314 | Benzyl crotonate | 65416-24-2 | | | | | | EFSA |
| 09.315 | Benzyl dodecanoate | 140-25-0 | | | | | | EFSA |
| 09.316 | Benzyl hexanoate | 6938-45-0 | | 10521 | | | | EFSA |
| 09.317 | Benzyl lactate | 2051-96-9 | | | | | | EFSA |
| 09.318 | Benzyl octanoate | 10276-85-4 | | | | | | EFSA |
| 09.319 | DL-Bornyl butyrate | 13109-70-1 | 1412 | | | | | EFSA |
| 09.321 | Butyl 2-methylbut-2(cis)-enoate | 7785-64-0 | | | | | | EFSA |
| 09.323 | sec-Butyl acetate | 105-46-4 | | 10527 | | | | EFSA |
| 09.324 | Butyl but-(2E)-enoate | 591-63-9 | | | | | | EFSA |
| 09.325 | sec-Butyl butyrate | 819-97-6 | | 10528 | | | | EFSA |
| 09.326 | Butyl deca-(2E,4Z)-dienoate | 28369-24-6 | | 10529 | | | | EFSA |
| 09.327 | Butyl decanoate | 30673-36-0 | | 10530 | | | | EFSA |
| 09.328 | sec-Butyl formate | 589-40-2 | | 10532 | | | | EFSA |
| 09.329 | Butyl hex-2-enoate | 13416-74-5 | | | | | | EFSA |
| 09.330 | Butyl hex-(3E)-enoate | 118869-62-8 | | | | | | EFSA |
| 09.331 | Butyl hexadecanoate | 111-06-8 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.332 | sec-Butyl hexanoate | 820-00-8 | | 10533 | | | | EFSA |
| 09.333 | sec-Butyl lactate | 18449-60-0 | | | | | | EFSA |
| 09.334 | Butyl nonanoate | 50623-57-9 | | | | | | EFSA |
| 09.335 | Butyl oct-2-enoate | 57403-32-4 | | 10536 | | | | EFSA |
| 09.337 | Carvacryl acetate | 6380-28-5 | | | | | | EFSA |
| 09.339 | Cinnamyl 2-methylcrotonate (mixture of isomers) | 61792-12-9 | | | | | | EFSA |
| 09.340 | Citronellyl 2-methylbut-2-enoate | 24717-85-9 | 1823 | | | | | EFSA |
| 09.341 | Citronellyl hexanoate | 10580-25-3 | | | | | | EFSA |
| 09.342 | Cyclogeranyl acetate | 69842-11-1 | | | | | | EFSA |
| 09.345 | Di-isopentyl succinate | 818-04-2 | | 10555 | | | | EFSA |
| 09.346 | Dibutyl malate | 6280-99-5 | | | | | | EFSA |
| 09.347 | Dibutyl succinate | 141-03-7 | | | | | | EFSA |
| 09.348 | Diethyl adipate | 141-28-6 | | | | | | EFSA |
| 09.349 | Diethyl citrate | 32074-56-9 | | | | | | EFSA |
| 09.350 | Diethyl fumarate | 623-91-6 | | | | | | EFSA |
| 09.351 | Diethyl maleate | 141-05-9 | | 10551 | | | | EFSA |
| 09.352 | Diethyl nonanedioate | 624-17-9 | | 10549 | | | | EFSA |
| 09.353 | Diethyl oxalate | 95-92-1 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|----------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.354 | Diethyl pentanedioate | 818-38-2 | | | | | | EFSA |
| 09.355 | neo-Dihydrocarvyl acetate | 56422-50-5 | | 10859 | | | | EFSA |
| 09.356 | 1,1-Dimethylethyl propionate | 20487-40-5 | | | | | | EFSA |
| 09.358 | 3,7-Dimethyloctyl acetate | 20780-49-8 | | 10899 | | | | EFSA |
| 09.360 | Ethyl 2-acetoxypropionate | 2985-28-6 | | | | | | EFSA |
| 09.362 | Ethyl 2-hydroxy-4-methylbenzoate | 60770-00-5 | | | | | | EFSA |
| 09.363 | Ethyl 2-methoxybenzoate | 7335-26-4 | | | | | | EFSA |
| 09.364 | Ethyl 2-phenylpropionate | 2510-99-8 | | | | | | EFSA |
| 09.365 | Ethyl 3-methylcrotonate | 638-10-8 | | 10610 | | | | EFSA |
| 09.367 | Ethyl 4-hydroxybenzoate | 120-47-8 | | | | | | EFSA |
| 09.368 | Ethyl 4-methylpent-3-enoate | 6849-18-9 | | 10615 | | | | EFSA |
| 09.370 | Ethyl dec-9-enoate | 67233-91-4 | | 10579 | | | | EFSA |
| 09.371 | Ethyl deca-2,4,7-trienoate | 78417-28-4 | 1193 | 10576 | | | | EFSA |
| 09.372 | Ethyl dodec-(2E)-enoate | 28290-90-6 | | 10584 | | | | EFSA |
| 09.374 | Ethyl hept-(2E)-enoate | 54340-72-6 | | | | | | EFSA |
| 09.375 | Ethyl methacrylate | 97-63-2 | | | | | | EFSA |
| 09.377 | Ethyl oct-3-enoate | 1117-65-3 | 1632 | 10618 | | | | EFSA |
| 09.379 | Ethyl pent-2-enoate | 2445-93-4 | | 10623 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.380 | Ethyl pentadecanoate | 41114-00-5 | | 10622 | | | | EFSA |
| 09.381 | 2-Ethylhexyl acetate | 103-09-3 | | | | | | EFSA |
| 09.382 | Geranyl 2-methylbutyrate | 68705-63-5 | 1820 | | | | | EFSA |
| 09.383 | Geranyl 2-methylcrotonate | 7785-33-3 | 1822 | 11829 | | | | EFSA |
| 09.385 | Hept-2-enyl acetate | 16939-73-4 | 1798 | 10661 | | | 2 | EFSA |
| 09.386 | sec-Hept-4(cis)-enyl acetate | 94088-33-2 | | | | | | EFSA |
| 09.387 | Heptyl 2-methylbutyrate | 50862-12-9 | | 10668 | | | | EFSA |
| 09.388 | sec-Heptyl acetate | 5921-82-4 | | 10802 | | | | EFSA |
| 09.390 | Heptyl hexanoate | 6976-72-3 | | 10666 | | | | EFSA |
| 09.391 | sec-Heptyl hexanoate | 6624-58-4 | | 10805 | | | | EFSA |
| 09.392 | Heptyl isovalerate | 56423-43-9 | | 10667 | | | | EFSA |
| 09.394 | E-Hex-2-enyl acetate | 2497-18-9 | 1355 | 643 | At least 90%; secondary component 5-6% (Z)-2-hexenyl acetate | | 2 | EFSA |
| 09.395 | E -Hex-2-enyl propionate | 53398-80-4 | 1378 | 11830 | | | 2 | EFSA |
| 09.396 | Hex-2-enyl butyrate | 53398-83-7 | 1375 | | | | 2 | EFSA |
| 09.397 | Hex-2-enyl formate | 53398-78-0 | 1376 | 11858 | | | 2 | EFSA |
| 09.398 | Hex-(2E)-enyl hexanoate. | 53398-86-0 | 1381 | | At least 93%; secondary components 2-3% hexanoic acid and 2-3% 2-hexenol | | 2 | EFSA |
| 09.399 | (2E)-Hexenyl isovalerate | 68698-59-9 | 1377 | | | | 2 | EFSA |
| 09.400 | Hex-2-enyl phenylacetate | 68133-78-8 | | | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------------|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.401 | Isopentyl acetoacetate | 2308-18-1 | 598 | 227 | | | | JECFA |
| 09.402 | Ethyl acetoacetate | 141-97-9 | 595 | 240 | | | | JECFA |
| 09.403 | Butyl acetoacetate | 591-60-6 | 596 | 241 | | | | JECFA |
| 09.404 | Isobutyl acetoacetate | 7779-75-1 | 597 | 242 | | | | JECFA |
| 09.405 | Geranyl acetoacetate | 10032-00-5 | 599 | 243 | | | | JECFA |
| 09.406 | Benzyl 3-oxobutyrate | 5396-89-4 | 848 | 244 | | | | EFSA |
| 09.407 | 2-Phenethyl 3-methylcrotonate | 42078-65-9 | 998 | 246 | | | | EFSA |
| 09.408 | Isobutyl 2-methylbut-2(cis)-enoate | 7779-81-9 | 1213 | 247 | | | | EFSA |
| 09.409 | Ethyl 2-methylbutyrate | 7452-79-1 | 206 | 265 | | | | JECFA |
| 09.410 | Allyl 2-ethylbutyrate | 7493-69-8 | 11 | 281 | | | 2 | JECFA/EFSA |
| 09.411 | Allyl cyclohexanebutyrate | 7493-65-4 | 14 | 283 | | | 2 | JECFA/EFSA |
| 09.412 | Methyl isobutyrate | 547-63-7 | 185 | 287 | | | | JECFA |
| 09.413 | Ethyl isobutyrate | 97-62-1 | 186 | 288 | | | | JECFA |
| 09.414 | Propyl isobutyrate | 644-49-5 | 187 | 289 | | | | JECFA |
| 09.415 | Isopropyl isobutyrate | 617-50-5 | 309 | 290 | | | | JECFA |
| 09.416 | Butyl isobutyrate | 97-87-0 | 188 | 291 | | | | JECFA |
| 09.417 | Isobutyl isobutyrate | 97-85-8 | 194 | 292 | | | | JECFA |
| 09.418 | Pentyl isobutyrate | 2445-72-9 | | 293 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------|-----------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.419 | Isopentyl isobutyrate | 2050-01-3 | 49 | 294 | | | | JECFA |
| 09.420 | Heptyl isobutyrate | 2349-13-5 | 190 | 295 | | | | JECFA |
| 09.421 | Citronellyl isobutyrate | 97-89-2 | 71 | 296 | At least 92%; secondary component 3-5% citronellol | | | JECFA |
| 09.423 | Linalyl isobutyrate | 78-35-3 | 362 | 298 | | | | JECFA |
| 09.424 | Neryl isobutyrate | 2345-24-6 | 73 | 299 | At least 92%; secondary components 2-5% nerol and 1-2% geraniol | | | JECFA |
| 09.425 | Terpinyl 2-methylpropionate | 7774-65-4 | 371 | 300 | | | | JECFA |
| 09.426 | Benzyl isobutyrate | 103-28-6 | 844 | 301 | | | | EFSA |
| 09.427 | Phenethyl isobutyrate | 103-48-0 | 992 | 302 | | | | EFSA |
| 09.428 | 3-Phenylpropyl isobutyrate | 103-58-2 | 640 | 303 | | | | EFSA |
| 09.429 | p-Tolyl isobutyrate | 103-93-5 | 701 | 304 | | | | EFSA |
| 09.430 | Piperonyl isobutyrate | 5461-08-5 | 895 | 305 | | | | EFSA |
| 09.431 | Geranyl isobutyrate | 2345-26-8 | 72 | 306 | | | | JECFA |
| 09.432 | Methyl 4-methylvalerate | 2412-80-8 | 216 | 322 | | | | JECFA |
| 09.433 | Ethyl lactate | 97-64-3 | 931 | 371 | | | | EFSA |
| 09.434 | Butyl lactate | 138-22-7 | 932 | 372 | | | | EFSA |
| 09.435 | Ethyl 4-oxovalerate | 539-88-8 | 607 | 373 | | | | JECFA |
| 09.436 | Butyl 4-oxovalerate | 2052-15-5 | 608 | 374 | | | | JECFA |
| 09.439 | Diethyl malate | 7554-12-3 | 620 | 382 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.441 | Butyl ethyl malonate | 17373-84-1 | 615 | 384 | | | | JECFA |
| 09.442 | Ethyl pyruvate | 617-35-6 | 938 | 430 | | | | EFSA |
| 09.443 | Isopentyl pyruvate | 7779-72-8 | 939 | 431 | | | | EFSA |
| 09.444 | Diethyl succinate | 123-25-1 | 617 | 438 | | | | JECFA |
| 09.445 | Dimethyl succinate | 106-65-0 | 616 | 439 | | | | JECFA |
| 09.446 | Diethyl tartrate | 87-91-2 | 622 | 440 | | | | JECFA |
| 09.447 | Ethyl isovalerate | 108-64-5 | 196 | 442 | | | | JECFA |
| 09.448 | Propyl isovalerate | 557-00-6 | 197 | 443 | | | | JECFA |
| 09.449 | Butyl isovalerate | 109-19-3 | 198 | 444 | | | | JECFA |
| 09.450 | Isopropyl isovalerate | 32665-23-9 | 310 | 445 | | | | JECFA |
| 09.451 | Octyl isovalerate | 7786-58-5 | 200 | 446 | | | | JECFA |
| 09.452 | Nonyl isovalerate | 7786-47-2 | 201 | 447 | | | | JECFA |
| 09.453 | Geranyl isovalerate | 109-20-6 | 75 | 448 | | | | JECFA |
| 09.454 | Linalyl isovalerate | 1118-27-0 | 363 | 449 | | | | JECFA |
| 09.455 | Menthyl isovalerate | 16409-46-4 | 432 | 450 | | | | JECFA |
| 09.456 | DL-Bornyl isovalerate | 76-50-6 | 1393 | 451 | | | | EFSA |
| 09.457 | DL-Isobornyl isovalerate | 7779-73-9 | 1394 | 452 | | | | EFSA |
| 09.458 | Benzyl isovalerate | 103-38-8 | 845 | 453 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|----------------------------------|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.459 | Cinnamyl isovalerate | 140-27-2 | 654 | 454 | | | | EFSA |
| 09.460 | Citronellyl isovalerate | 68922-10-1 | | 455 | | | | SCF/CoE |
| 09.461 | Terpinyl isovalerate | 1142-85-4 | 372 | 456 | | | | JECFA |
| 09.462 | Methyl isovalerate | 556-24-1 | 195 | 457 | | | | JECFA |
| 09.463 | 3-Methylbutyl 3-methylbutyrate | 659-70-1 | 50 | 458 | | | | JECFA |
| 09.464 | Cyclohexyl isovalerate | 7774-44-9 | 1096 | 459 | | | | EFSA |
| 09.465 | Rhodinyl isovalerate | 7778-96-3 | 77 | 460 | | | | JECFA |
| 09.466 | Phenethyl isovalerate | 140-26-1 | 994 | 461 | | | | EFSA |
| 09.467 | 3-Phenylpropyl isovalerate | 5452-07-3 | 641 | 462 | | | | EFSA |
| 09.468 | alpha-Pentylcinnamyl isovalerate | 7493-80-3 | 678 | 463 | | | | EFSA |
| 09.469 | Allyl cyclohexanevalerate | 7493-68-7 | 15 | 474 | | | 2 | JECFA/EFSA |
| 09.470 | Cinnamyl isobutyrate | 103-59-3 | 653 | 496 | | | | EFSA |
| 09.471 | Neryl isovalerate | 3915-83-1 | 76 | 508 | | | | JECFA |
| 09.472 | Isobutyl isovalerate | 589-59-3 | 203 | 568 | | | | JECFA |
| 09.473 | Octyl isobutyrate | 109-15-9 | 192 | 593 | | | | JECFA |
| 09.474 | Dibutyl sebacate | 109-43-3 | 625 | 622 | At least 93%; secondary components 2-4% butyl ester of C14-, C16-, and C18- fatty acids | | | JECFA |
| 09.475 | Diethyl sebacate | 110-40-7 | 624 | 623 | | | | JECFA |
| 09.476 | Ethyl 3-phenyl-3-oxopropionate | 94-02-0 | 834 | 627 | At least 88%; secondary component 7-9% ethyl benzoate | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.478 | Hexyl isobutyrate | 2349-07-7 | 189 | 646 | | | | JECFA |
| 09.480 | o-Tolyl isobutyrate | 36438-54-7 | 700 | 681 | | | | EFSA |
| 09.481 | Diethyl carbonate | 105-58-8 | | 710 | | | | SCF/CoE |
| 09.482 | Allyl cyclohexaneacetate | 4728-82-9 | 12 | 2070 | | | 2 | JECFA/EFSA |
| 09.483 | Methyl 2-methylbutyrate | 868-57-5 | 205 | 2085 | At least 92%; secondary component 5-7% methyl isovalerate | | | JECFA |
| 09.484 | 1,1-Dimethyl-3-phenylpropyl isobutyrate | 10031-71-7 | 1461 | 2086 | | | | EFSA |
| 09.485 | 2-Phenylpropyl isobutyrate | 65813-53-8 | 1470 | 2087 | | | | EFSA |
| 09.486 | 1-Phenethyl isobutyrate | 7775-39-5 | 804 | 2088 | | | | EFSA |
| 09.487 | 2-Phenoxyethyl isobutyrate | 103-60-6 | 1028 | 2089 | | | | EFSA |
| 09.488 | Ethyl cyclohexanepropionate | 10094-36-7 | 966 | 2095 | | | | EFSA |
| 09.489 | Allyl isovalerate | 2835-39-4 | 7 | 2098 | | | 2 | JECFA /EFSA |
| 09.490 | Diethyl malonate | 105-53-3 | 614 | 2106 | | | | JECFA |
| 09.491 | Butyl-O-butyryllactate | 7492-70-8 | 935 | 2107 | | | | EFSA |
| 09.492 | Allyl cyclohexanehexanoate | 7493-66-5 | 16 | 2180 | | | 2 | JECFA/EFSA |
| 09.493 | Allyl 2-methylcrotonate | 7493-71-2 | 10 | 2183 | | | 2 | JECFA/EFSA |
| 09.494 | Benzyl 2-methylcrotonate | 37526-88-8 | 846 | 2184 | | | | EFSA |
| 09.495 | Ethyl 2-methylcrotonate | 5837-78-5 | 1824 | 2185 | | | | EFSA |
| 09.496 | Phenethyl 2-methylcrotonate | 55719-85-2 | 997 | 2186 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------------|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.498 | Allyl cyclohexanepropionate | 2705-87-5 | 13 | 2223 | | | 2 | JECFA/EFSA |
| 09.499 | Pentyl isovalerate | 25415-62-7 | | 2224 | | | | EFSA |
| 09.501 | Ethyl 2-acetyl-3-phenylpropionate | 620-79-1 | 835 | 2241 | | | | EFSA |
| 09.502 | Ethyl butyryl lactate | 71662-27-6 | | 2242 | | | | EFSA |
| 09.505 | Hex-3-enyl isovalerate | 10032-11-8 | 202 | 2344 | | | | JECFA |
| 09.506 | Hex-3-enyl 2-methylbutyrate | 10094-41-4 | 211 | 2345 | | | | JECFA |
| 09.507 | Hexyl 2-methylbutyrate | 10032-15-2 | 208 | 4132 | | | | JECFA |
| 09.508 | Benzyl 2,3-dimethylcrotonate | 7492-69-5 | 847 | 11868 | | | | EFSA |
| 09.509 | 1-Methyl-1-phenethyl isobutyrate | 7774-60-9 | 1657 | 11828 | | | | EFSA |
| 09.510 | Ethyl aconitate | 1321-30-8 | 628 | 11845 | | | | JECFA |
| 09.511 | Tributyl acetylcitrate | 77-90-7 | 630 | | | | | JECFA |
| 09.512 | Triethyl citrate | 77-93-0 | 629 | 11762 | | | | JECFA |
| 09.513 | Isopropyl 2-methylcrotonate | 1733-25-1 | 312 | 10733 | | | | JECFA |
| 09.514 | Ethyl 2,4-dioxohexanoate | 13246-52-1 | 603 | 11903 | | | | JECFA |
| 09.515 | Geranyl 2-ethylbutyrate | 73019-14-4 | 78 | 11667 | | | | JECFA |
| 09.516 | 2-Methylbutyl 2-methylbutyrate | 2445-78-5 | 212 | 10773 | At least 90%; secondary component 5-7% 2-methylbutyl 3-methylbutyrate | | | JECFA |
| 09.517 | Methyl citronellate | 2270-60-2 | 354 | 10781 | | | | JECFA |
| 09.518 | 4-Methylphenyl isovalerate | 55066-56-3 | 702 | 10545 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.519 | Butyl 2-methylbutyrate | 15706-73-7 | 207 | 10534 | | | | JECFA |
| 09.520 | Methyl 3-oxo-2-pentyl-1-cyclopentylacetate | 24851-98-7 | | 10785 | | | | EFSA |
| 09.521 | Methyl-3-oxo-2-pent-2-enyl-1-cyclopentylacetate | 39924-52-2 | 1400 | 10821 | Mixture of isomers: trans-trans isomer: 2-8%, trans-cis isomer: 84-92%, cis-cis isomer:3-8%. Sum of three main peaks: 98-100% | | | EFSA |
| 09.522 | Ethyl 3-hydroxybutyrate | 5405-41-4 | 594 | 10596 | | | | JECFA |
| 09.523 | Dodecyl isobutyrate | 6624-71-1 | 193 | 10563 | | | | JECFA |
| 09.524 | Ethyl 2-methylpent-3-enoate | 1617-23-8 | 350 | 10612 | | | | JECFA |
| 09.525 | Maltyl isobutyrate | 65416-14-0 | 1482 | 10739 | | | 2 | EFSA |
| 09.526 | Ethyl 2-methylvalerate | 39255-32-8 | 214 | 10616 | | | | JECFA |
| 09.527 | Ethyl 2-methylpent-4-enoate | 53399-81-8 | 351 | 10613 | | | | JECFA |
| 09.528 | trans-3-Heptenyl isobutyrate | | 191 | 10663 | | | | JECFA |
| 09.529 | Hexyl isovalerate | 10032-13-0 | 199 | 10692 | | | | JECFA |
| 09.530 | Isopentyl 2-methylbutyrate | 27625-35-0 | 51 | 10721 | | | | JECFA |
| 09.531 | 2-Methylbutyl isovalerate | 2445-77-4 | 204 | 10772 | | | | JECFA |
| 09.532 | Methyl 3-hydroxyhexanoate | 21188-58-9 | 600 | 10812 | | | | JECFA |
| 09.533 | Ethyl brassylate | 105-95-3 | 626 | 10571 | | | | JECFA |
| 09.534 | Ethyl cyclohexanecarboxylate | 3289-28-9 | 963 | 11916 | | | | EFSA |
| 09.535 | Ethyl 3-hydroxyhexanoate | 2305-25-1 | 601 | 11764 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.536 | Methyl cyclohexanecarboxylate | 4630-82-4 | 962 | 11920 | | | | EFSA |
| 09.537 | Octyl 2-methylbutyrate | 29811-50-5 | 209 | 10866 | | | | JECFA |
| 09.538 | Phenethyl 2-methylbutyrate | 24817-51-4 | 993 | 10883 | | | | EFSA |
| 09.539 | Oct-3-yl 2-methylcrotonate | 94133-92-3 | 448 | | | | | JECFA |
| 09.540 | Ethyl 2-methylpenta-3,4-dienoate | 60523-21-9 | 353 | | | | | EFSA |
| 09.541 | Ethyl 3-methylvalerate | 5870-68-8 | 215 | | | | | JECFA |
| 09.542 | Ethyl 3-oxohexanoate | 3249-68-1 | 602 | | | | | JECFA |
| 09.543 | Glyceryl 5-hydroxydecanoate | 26446-31-1 | 923 | 10648 | Mixture of 9-11% glycerol; 24-30% delta-decalactone; 25-34% monoglyceride, 13-21% diglyceride and 6-11% triglyceride | | | EFSA |
| 09.544 | Glyceryl 5-hydroxydodecanoate | 26446-32-2 | 924 | 10649 | Mixture of 5-8% glycerol; 37-47% delta-dodecalactone; 16-28% monoglyceride; 11-19% diglyceride and 3-7% triglyceride | | | EFSA |
| 09.545 | Hex-(3Z)-enyl lactate | 61931-81-5 | 934 | 10681 | | | | EFSA |
| 09.546 | Hexyl-2-methylpent-(3 and 4)-enoate | 58625-95-9 | 352 | | | | | JECFA |
| 09.547 | Isopropyl 2-methylbutyrate | 66576-71-4 | 210 | | | | | JECFA |
| 09.548 | Methyl 2-hydroxy-4-methylvalerate | 40348-72-9 | 590 | | | | | JECFA |
| 09.549 | Methyl 2-methylvalerate | 2177-77-7 | 213 | | | | | JECFA |
| 09.550 | Methyl 2-oxo-3-methylvalerate | 3682-42-6 | 591 | | | | | JECFA |
| 09.551 | l-Menthyl lactate | 59259-38-0 | 433 | | | | | JECFA |
| 09.552 | 3-Oxodecanoic acid glyceride | 91052-69-6 | 914 | 10650 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------------|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.553 | 3-Oxododecanoic acid glyceride | 91052-70-9 | 915 | 10651 | | | | EFSA |
| 09.554 | 3-Oxohexadecanoic acid glyceride | 91052-71-0 | 917 | 10652 | | | | EFSA |
| 09.555 | 3-Oxohexanoic acid glyceride | 91052-72-1 | 910 | 10653 | | | | EFSA |
| 09.556 | 3-Oxooctanoic acid glyceride | 91052-68-5 | 911 | 10654 | | | | EFSA |
| 09.557 | 3-Oxotetradecanoic acid glyceride | 91052-73-2 | 916 | 10655 | | | | EFSA |
| 09.558 | Dimethyl malonate | 108-59-8 | | 11754 | | | | EFSA |
| 09.559 | Hex-3(cis)-enyl 2-methylcrotonate | 67883-79-8 | 1277 | | | | | EFSA |
| 09.560 | Hex-3(cis)-enyl anisate | 121432-33-5 | | | | | | EFSA |
| 09.561 | Hex-3(cis)-enyl anthranilate | 65405-76-7 | 1538 | 10676 | | | | EFSA |
| 09.562 | trans-3-Hexenyl formate | 56922-80-6 | | | | | 1 | EFSA |
| 09.563 | Hex-3(cis)-enyl isobutyrate | 41519-23-7 | 1275 | 11783 | | | | EFSA |
| 09.564 | Hex-3(cis)-enyl propionate | 33467-74-2 | 1274 | 10683 | | | | EFSA |
| 09.565 | (3Z)-Hexenyl 2-oxopropionate | 68133-76-6 | 1846 | 10684 | | | | EFSA |
| 09.566 | (3Z)-Hexenyl (E)-but-2-enoate | 65405-80-3 | 1276 | | | | | EFSA |
| 09.567 | Hex-(3Z)-enyl decanoate | 85554-69-4 | | | | | | EFSA |
| 09.568 | (3Z)-hexenyl (E)-hexenoate | 53398-87-1 | 1279 | | At least 86%; secondary components 6-7% 3-hexenyl 3-hexenoate and 4-5% 1-hexenyl 2-hexenoate | | | EFSA |
| 09.569 | Hex-(3Z)-enyl octanoate | 61444-41-5 | | | | | | EFSA |
| 09.570 | (Z)-Hex-3-enyl salicylate | 65405-77-8 | | 10685 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.571 | (3Z)-hexenyl valerate | 35852-46-1 | 1278 | 10686 | | | | EFSA |
| 09.572 | Hex-(4Z)-enyl acetate | 42125-17-7 | | | | | | EFSA |
| 09.573 | Hexa-2,4-dienyl acetate | 1516-17-2 | 1780 | 10675 | | | 2 | EFSA |
| 09.574 | Hexadec-1-yl acetate | 629-70-9 | | | | | | EFSA |
| 09.575 | (3Z)-Hexenyl heptanoate | 61444-39-1 | | | | | | EFSA |
| 09.578 | Hexyl crotonate | 1617-25-0 | | 10688 | | | | EFSA |
| 09.579 | Hexyl dodecanoate | 34316-64-8 | | | | | | EFSA |
| 09.580 | Hexyl lactate | 20279-51-0 | | | | | | EFSA |
| 09.581 | Hexyl salicylate | 6259-76-3 | | 10695 | | | | EFSA |
| 09.582 | Hexyl tetradecanoate | 42231-99-2 | | | | | | EFSA |
| 09.583 | Hexyl valerate | 1117-59-5 | | 10696 | | | | EFSA |
| 09.584 | Isobornyl isobutyrate | 85586-67-0 | 1863 | | | | | EFSA |
| 09.585 | Isobutyl 2-methylbutyrate | 2445-67-2 | | 10710 | | | | EFSA |
| 09.586 | Isobutyl 2-methylprop-2-enoate | 97-86-9 | | | | | | EFSA |
| 09.587 | Isobutyl decanoate | 30673-38-2 | | 10707 | | | | EFSA |
| 09.588 | Isobutyl dodecanoate | 37811-72-6 | | 10708 | | | | EFSA |
| 09.589 | Isobutyl hexadecanoate | 110-34-9 | | 10715 | | | | EFSA |
| 09.590 | Isobutyl lactate | 585-24-0 | | 10709 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.592 | Isobutyl octadecanoate | 646-13-9 | | | | | | EFSA |
| 09.593 | Isobutyl octanoate | 5461-06-3 | | 10714 | | | | EFSA |
| 09.594 | Isobutyl tetradecanoate | 25263-97-2 | | 10712 | | | | EFSA |
| 09.596 | (Z)-But-2-enoate | 10482-55-0 | | | | | | EFSA |
| 09.598 | Isopentyl decanoate | 2306-91-4 | | | | | | EFSA |
| 09.599 | Isopentyl heptanoate | 109-25-1 | | 10719 | | | | EFSA |
| 09.600 | Isopentyl hexadecanoate | 81974-61-0 | | 10723 | | | | EFSA |
| 09.601 | Isopentyl lactate | 19329-89-6 | | 10720 | | | | EFSA |
| 09.602 | Isopentyl tetradecanoate | 62488-24-8 | | 10722 | | | | EFSA |
| 09.603 | Isopropyl crotonate | 6284-46-4 | | 10729 | | | | EFSA |
| 09.604 | Isopropyl decanoate | 2311-59-3 | | 10730 | | | | EFSA |
| 09.605 | Isopropyl dodecanoate | 10233-13-3 | | | | | | EFSA |
| 09.606 | Isopropyl hexadecanoate | 142-91-6 | | 10732 | | | | EFSA |
| 09.608 | Isopropyl octanoate | 5458-59-3 | | 10731 | | | | EFSA |
| 09.609 | Isopropyl valerate | 18362-97-5 | | | | | | EFSA |
| 09.611 | 4-Isopropylbenzyl acetate | 59230-57-8 | | | | | | EFSA |
| 09.612 | Lavandulyl acetate | 25905-14-0 | | | | | | EFSA |
| 09.614 | Linalyl valerate | 10471-96-2 | | 10738 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.615 | p-Menth-1-en-9-yl acetate | 28839-13-6 | 972 | 10748 | | | | EFSA |
| 09.616 | mono-Menth-3-yl succinate | 77341-67-4 | 447 | | | | | JECFA |
| 09.617 | p-Menthan-8-yl acetate | 58985-18-5 | | | | | | EFSA |
| 09.618 | Menthyl formate | 2230-90-2 | | 10751 | | | | EFSA |
| 09.619 | (1R,2S,5R)-Menthyl hexanoate | 6070-16-2 | | | | | | EFSA |
| 09.620 | Menthyl phenylacetate | 1154-92-3 | | | | | | EFSA |
| 09.621 | (1R,2S,5R)-Menthyl salicylate | 89-46-3 | | | | | | EFSA |
| 09.623 | Methyl 2,4-dihydroxy-3,6-dimethylbenzoate | 4707-47-5 | | | | | | EFSA |
| 09.624 | Methyl 2-methylcrotonate | 6622-76-0 | | | | | | EFSA |
| 09.625 | Methyl 2-methylpent-3(E)-enoate | 33603-30-4 | | | | | | EFSA |
| 09.626 | Methyl 2-oxopropionate | 600-22-6 | | 10848 | | | | EFSA |
| 09.629 | Methyl 3-acetoxyhexanoate | 21188-60-3 | | 10755 | | | | EFSA |
| 09.631 | Methyl 4-methylbenzoate | 99-75-2 | | | | | | EFSA |
| 09.632 | Methyl 5-acetoxyhexanoate | 35234-22-1 | 1719 | 10756 | | | | EFSA |
| 09.633 | Methyl 5-hydroxydecanoate | 101853-47-8 | | | | | | EFSA |
| 09.634 | Methyl acetoacetate | 105-45-3 | | | | | | EFSA |
| 09.636 | Methyl crotonate | 623-43-8 | | | | | | EFSA |
| 09.637 | Methyl dec-2-enoate | 2482-39-5 | | 11799 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|----------|--|---------------------|----------|-------------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.638 | Methyl dec-(4Z)-enoate | 7367-83-1 | | 10784 | | | | EFSA |
| 09.639 | Methyl (E,Z)-deca-2,4-dienoate | 4493-42-9 | 1191 | | At least 93%; secondary component 2-5% (E,E) methyl 2,4-decadienoate | | | EFSA |
| 09.640 | Methyl deca-4,8-dienoate | 1191-03-3 | | 10782 | | | | EFSA |
| 09.641 | Methyl dodec-(2E)-enoate | 6208-91-9 | | 10792 | | | | EFSA |
| 09.642 | Methyl formate | 107-31-3 | | 10795 | | | | EFSA |
| 09.643 | Methyl geranate | 1189-09-9 | | 10797 | | | | EFSA |
| 09.644 | (S)-Methyl lactate | 27871-49-4 | | | | | | EFSA |
| 09.645 | Mixture of methyl linoleate and methyl linolenate | | 346 | 713, 714 | 44-46% methyl linolenate; 18-20% methyl linoleate; 22-25% methyl stearate and methyl oleate; 7-8% methyl palmitate | | | SCF/CoE/ JECFA |
| 09.647 | Methyl methacrylate | 80-62-6 | 1834 | | | | | EFSA |
| 09.648 | Methyl N,N-dimethylantranilate | 10072-05-6 | 1551 | | | | | EFSA |
| 09.649 | Methyl N-acetylantranilate | 2719-08-6 | 1550 | | | | | EFSA |
| 09.650 | Methyl N-formylantranilate | 41270-80-8 | 1549 | | | | | EFSA |
| 09.651 | Methyl octadecanoate | 112-61-8 | | 10849 | | | | EFSA |
| 09.652 | Methyl oleate | 112-62-9 | | 10836 | | | | EFSA |
| 09.655 | 3-Methylbut-3-enyl acetate | 5205-07-2 | 1269 | | | | | EFSA |
| 09.656 | 3-Methylbut-3-enyl benzoate | 5205-12-9 | | | | | | EFSA |
| 09.657 | 1-Methylbutyl acetate | 626-38-0 | 1146 | 10761 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|----------------------------------|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.658 | 1-Methylbutyl butyrate | 60415-61-4 | 1142 | 10763 | | | | EFSA |
| 09.659 | 2-Methylbutyl butyrate | 51115-64-1 | | | | | | EFSA |
| 09.660 | 2-Methylbutyl decanoate | 68067-33-4 | | 10765 | | | | EFSA |
| 09.661 | 2-Methylbutyl formate | 35073-27-9 | | | | | | EFSA |
| 09.662 | 2-Methylbutyl hexanoate | 2601-13-0 | | 10768 | | | | EFSA |
| 09.663 | 2-Methylbutyl isobutyrate | 2445-69-4 | | 10770 | | | | EFSA |
| 09.664 | 2-Methylbutyl octanoate | 67121-39-5 | | 10776 | | | | EFSA |
| 09.665 | 2-Methylbutyl propionate | 2438-20-2 | | 10778 | | | | EFSA |
| 09.666 | 2-Methylbutyl tetradecanoate | 93805-23-3 | | 10774 | | | | EFSA |
| 09.670 | Myrtanyl acetate | 29021-36-1 | | | | | | EFSA |
| 09.671 | (3S,6Z)-Nerolidyl acetate | 56001-43-5 | | 10862 | | | | EFSA |
| 09.672 | Non-(3Z)-enyl acetate | 13049-88-2 | | | | | | EFSA |
| 09.673 | Non-(6Z)-enyl acetate | 76238-22-7 | | | | | | EFSA |
| 09.674 | (E,Z)-3,6-Nonadien-1-ol, acetate | 211323-05-6 | 1285 | | | | | EFSA |
| 09.676 | sec-Octyl acetate | 2051-50-5 | | 10799 | | | | EFSA |
| 09.677 | Octyl hexanoate | 4887-30-3 | | 10865 | | | | EFSA |
| 09.678 | Pent-2-enyl hexanoate | 74298-89-8 | 1795 | | | | 2 | EFSA |
| 09.679 | Pentyl 2-methylbutyrate | 68039-26-9 | | 10875 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.680 | Pentyl 2-methylisocrotonate | 7785-63-9 | | | | | | EFSA |
| 09.681 | Pentyl dodecanoate | 5350-03-8 | | | | | | EFSA |
| 09.682 | Pentyl hexadecanoate | 31148-31-9 | | | | | | EFSA |
| 09.683 | Pentyl lactate | 6382-06-5 | | | | | | EFSA |
| 09.684 | (E)-2-Phenylethyl 2-butenate | 68141-20-8 | | 10880 | | | | EFSA |
| 09.685 | 2-Phenethyl decanoate | 61810-55-7 | | 10881 | | | | EFSA |
| 09.686 | Phenethyl lactate | 155449-46-0 | | | | | | EFSA |
| 09.687 | 2-Phenoxyethyl butyrate | 23511-70-8 | | | | | | EFSA |
| 09.688 | Phenyl acetate | 122-79-2 | 734 | 10878 | | | | EFSA |
| 09.689 | Phenyl salicylate | 118-55-8 | 736 | 11814 | | | | EFSA |
| 09.690 | 3-Phenylpropyl butyrate | 7402-29-1 | | | | | | EFSA |
| 09.691 | Phytyl acetate | 10236-16-5 | 1833 | | | | | EFSA |
| 09.692 | Prenyl acetate | 1191-16-8 | 1827 | 11796 | | | | EFSA |
| 09.693 | Prenyl benzoate | 5205-11-8 | | | | | | EFSA |
| 09.694 | Prenyl formate | 68480-28-4 | 1826 | | | | | EFSA |
| 09.695 | Prenyl isobutyrate | 76649-23-5 | 1828 | | | | | EFSA |
| 09.696 | Prenyl salicylate | 68555-58-8 | | | | | | EFSA |
| 09.698 | Propyl 2-methylbutyrate | 37064-20-3 | | 10891 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|----------------------------|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.699 | Propyl crotonate | 10352-87-1 | | | | | | EFSA |
| 09.700 | Propyl decanoate | 30673-60-0 | | | | | | EFSA |
| 09.701 | Allyl phenoxyacetate | 7493-74-5 | 18 | 228 | | | 2 | JECFA/EFSA |
| 09.702 | Propyl phenylacetate | 4606-15-9 | 1010 | 229 | | | | EFSA |
| 09.703 | Octyl phenylacetate | 122-45-2 | 1017 | 230 | | | | EFSA |
| 09.704 | (2E)-Geranyl phenylacetate | 102-22-7 | 1020 | 231 | | | | EFSA |
| 09.705 | Benzyl phenylacetate | 102-16-9 | 849 | 232 | | | | EFSA |
| 09.706 | Anisyl phenylacetate | 102-17-0 | 876 | 233 | | | | EFSA |
| 09.707 | Phenethyl phenylacetate | 102-20-5 | 999 | 234 | | | | EFSA |
| 09.708 | Cinnamyl phenylacetate | 7492-65-1 | 655 | 235 | | | | EFSA |
| 09.709 | p-Tolyl phenylacetate | 101-94-0 | 705 | 236 | | | | EFSA |
| 09.710 | Isoeugenyl phenylacetate | 120-24-1 | 1263 | 237 | | | | EFSA |
| 09.711 | Guaiacyl phenylacetate | 4112-89-4 | 719 | 238 | | | | EFSA |
| 09.712 | Santalyl phenylacetate | 1323-75-7 | 1022 | 239 | | | 2 | EFSA |
| 09.713 | Methyl 4-methoxybenzoate | 121-98-2 | 884 | 248 | | | | EFSA |
| 09.714 | Ethyl 4-methoxybenzoate | 94-30-4 | 885 | 249 | | | | EFSA |
| 09.715 | Methyl anthranilate | 134-20-3 | 1534 | 250 | | | | EFSA |
| 09.716 | Ethyl anthranilate | 87-25-2 | 1535 | 251 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.717 | Butyl anthranilate | 7756-96-9 | 1536 | 252 | | | | EFSA |
| 09.718 | Isobutyl anthranilate | 7779-77-3 | 1537 | 253 | | | | EFSA |
| 09.719 | Allyl anthranilate | 7493-63-2 | 20 | 254 | | | 2 | JECFA/EFSA |
| 09.721 | Linalyl anthranilate | 7149-26-0 | 1540 | 256 | | | | EFSA |
| 09.722 | Cyclohexyl anthranilate | 7779-16-0 | 1541 | 257 | | | | EFSA |
| 09.723 | Phenethyl anthranilate | 133-18-6 | 1543 | 258 | | | | EFSA |
| 09.724 | alpha-Terpinyl anthranilate | 14481-52-8 | 1542 | 259 | | | | EFSA |
| 09.725 | Methyl benzoate | 93-58-3 | 851 | 260 | | | | EFSA |
| 09.726 | Ethyl benzoate | 93-89-0 | 852 | 261 | | | | EFSA |
| 09.727 | Benzyl benzoate | 120-51-4 | 24 | 262 | | | | EFSA |
| 09.728 | Ethyl 4-phenylbutyrate | 10031-93-3 | 1458 | 307 | | | | EFSA |
| 09.729 | Methyl 4-phenylbutyrate | 2046-17-5 | 1464 | 308 | | | | EFSA |
| 09.730 | Ethyl cinnamate | 103-36-6 | 659 | 323 | | | | EFSA |
| 09.731 | Propyl cinnamate | 7778-83-8 | 660 | 324 | | | | EFSA |
| 09.732 | Isopropyl cinnamate | 7780-06-5 | 661 | 325 | | | | EFSA |
| 09.733 | Butyl cinnamate | 538-65-8 | 663 | 326 | | | | EFSA |
| 09.734 | Isobutyl cinnamate | 122-67-8 | 664 | 327 | | | | EFSA |
| 09.735 | Pentyl cinnamate (mixture of isomers) | 3487-99-8 | | 328 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.736 | Linalyl cinnamate | 78-37-5 | 668 | 329 | | | | EFSA |
| 09.737 | (S)-Terpinyl cinnamate | 10024-56-3 | 669 | 330 | | | | EFSA |
| 09.738 | Benzyl cinnamate | 103-41-3 | 670 | 331 | | | | EFSA |
| 09.739 | Cinnamyl cinnamate | 122-69-0 | 673 | 332 | | | | EFSA |
| 09.740 | Methyl cinnamate | 103-26-4 | 658 | 333 | | | | EFSA |
| 09.741 | Allyl cinnamate | 1866-31-5 | 19 | 334 | | | 2 | JECFA/EFSA |
| 09.742 | Isopentyl cinnamate | 7779-65-9 | 665 | 335 | | | | EFSA |
| 09.743 | Phenethyl cinnamate | 103-53-7 | 671 | 336 | | | | EFSA |
| 09.744 | Cyclohexyl cinnamate | 7779-17-1 | 667 | 337 | | | | EFSA |
| 09.745 | 3-Phenylpropyl cinnamate | 122-68-9 | 672 | 338 | | | | EFSA |
| 09.746 | Methyl 3-phenylpropionate | 103-25-3 | 643 | 427 | | | | EFSA |
| 09.747 | Ethyl 3-phenylpropionate | 2021-28-5 | 644 | 429 | | | | EFSA |
| 09.748 | Ethyl salicylate | 118-61-6 | 900 | 432 | | | | EFSA |
| 09.749 | Methyl salicylate | 119-36-8 | 899 | 433 | | | | EFSA |
| 09.750 | Isobutyl salicylate | 87-19-4 | 902 | 434 | | | | EFSA |
| 09.751 | Isopentyl salicylate | 87-20-7 | 903 | 435 | | | | EFSA |
| 09.752 | Benzyl salicylate | 118-58-1 | 904 | 436 | | | | EFSA |
| 09.753 | Phenethyl salicylate | 87-22-9 | 905 | 437 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|----------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.755 | Isopentyl benzoate | 94-46-2 | 857 | 562 | 65-68% 3-methylbutyl benzoate; 30-35% 2-methylbutyl benzoate; 1-5% n-pentyl benzoate | | | EFSA |
| 09.756 | Isobornyl phenylacetate | 94022-06-7 | | 566 | | | | EFSA |
| 09.757 | Isobutyl benzoate | 120-50-3 | 856 | 567 | | | | EFSA |
| 09.758 | Methyl p-tert-butylphenylacetate | 3549-23-3 | 1025 | 577 | | | | EFSA |
| 09.761 | Pentyl phenylacetate | 5137-52-0 | | 612 | | | | EFSA |
| 09.762 | Pentyl salicylate | 2050-08-0 | | 613 | | | | EFSA |
| 09.763 | Butyl salicylate | 2052-14-4 | 901 | 614 | | | | EFSA |
| 09.764 | Ethyl N-ethylanthranilate | 38446-21-8 | 1547 | 629 | | | | EFSA |
| 09.765 | Ethyl N-methylanthranilate | 35472-56-1 | 1546 | 632 | | | | EFSA |
| 09.766 | Eugenyl benzoate | 531-26-0 | 1533 | 636 | | | | EFSA |
| 09.767 | Geranyl benzoate | 94-48-4 | 860 | 639 | | | | EFSA |
| 09.768 | Hexyl benzoate | 6789-88-4 | 854 | 645 | | | | EFSA |
| 09.769 | Isobutyl N-methylanthranilate | 65505-24-0 | 1548 | 649 | | | | EFSA |
| 09.770 | Isopropyl benzoate | 939-48-0 | 855 | 652 | | | | EFSA |
| 09.771 | Linalyl benzoate | 126-64-7 | 859 | 654 | | | | EFSA |
| 09.772 | Linalyl phenylacetate | 7143-69-3 | 1019 | 655 | | | | EFSA |
| 09.774 | Phenethyl benzoate | 94-47-3 | | 667 | | | | EFSA |
| 09.776 | Propyl benzoate | 2315-68-6 | 853 | 677 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.779 | Butyl benzoate | 136-60-7 | | 740 | | | | EFSA |
| 09.780 | Cinnamyl benzoate | 5320-75-2 | 760 | 743 | | | | EFSA |
| 09.781 | Methyl N-methylantranilate | 85-91-6 | 1545 | 756 | | | | EFSA |
| 09.782 | Heptyl cinnamate | 10032-08-3 | 666 | 2104 | | | | EFSA |
| 09.783 | Methyl phenylacetate | 101-41-7 | 1008 | 2155 | | | | EFSA |
| 09.784 | Ethyl phenylacetate | 101-97-3 | 1009 | 2156 | | | | EFSA |
| 09.785 | Citronellyl phenylacetate | 139-70-8 | 1021 | 2157 | | | | EFSA |
| 09.786 | Isopropyl phenylacetate | 4861-85-2 | 1011 | 2158 | | | | EFSA |
| 09.787 | Butyl phenylacetate | 122-43-0 | 1012 | 2159 | | | | EFSA |
| 09.788 | Isobutyl phenylacetate | 102-13-6 | 1013 | 2160 | | | | EFSA |
| 09.789 | 3-Methylbutyl phenylacetate | 102-19-2 | 1014 | 2161 | 62-64% n-amyl; 33-36% isoamyl | | | EFSA |
| 09.790 | Allyl phenylacetate | 1797-74-6 | 17 | 2162 | | | 2 | JECFA/EFSA |
| 09.791 | (3S)-Rhodinyl phenylacetate | 10486-14-3 | 1018 | 2163 | | | | EFSA |
| 09.796 | Methyl 2-methoxybenzoate | 606-45-1 | 880 | 2192 | | | | EFSA |
| 09.797 | Ethyl (p-tolyloxy)acetate | 67028-40-4 | 1027 | 2243 | | | | EFSA |
| 09.798 | Ethyl vanillate | 617-05-0 | | 2302 | | | | EFSA |
| 09.799 | Methyl vanillate | 3943-74-6 | | 2305 | | | | EFSA |
| 09.801 | 2-Naphthyl anthranilate | 63449-68-3 | 1544 | 11862 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.802 | Ethyl 2-ethyl-3-phenylpropionate | 2983-36-0 | 1475 | 10587 | | | | EFSA |
| 09.803 | Propylene glycol dibenzoate | 19224-26-1 | 862 | 10890 | | | | EFSA |
| 09.804 | Hexyl phenylacetate | 5421-17-0 | 1015 | 10694 | | | | EFSA |
| 09.805 | Hex-3-enyl phenylacetate | 42436-07-7 | 1016 | 10682 | | | | EFSA |
| 09.806 | (Z)-Hex-3-enyl benzoate | 25152-85-6 | 858 | 11778 | 93-97% cis-hexenyl benzoate; 1-2% trans-3-hexenyl benzoate | | | EFSA |
| 09.807 | o-Tolyl salicylate | 617-01-6 | 907 | | | | | EFSA |
| 09.808 | Guaiyl acetate | 134-28-1 | | 10659 | | | | EFSA |
| 09.809 | p-Mentha-1,8(10)-dien-9-yl acetate | 15111-97-4 | | 10743 | | | 2 | EFSA |
| 09.811 | Vanillin isobutyrate | 20665-85-4 | 891 | | | | | EFSA |
| 09.812 | Glyceryl tribenzoate | 614-33-5 | 861 | 10656 | | | | EFSA |
| 09.813 | Propyl dodecanoate | 3681-78-5 | | | | | | EFSA |
| 09.814 | Propyl hexadecanoate | 2239-78-3 | | 10893 | | | | EFSA |
| 09.815 | Propyl lactate | 616-09-1 | | | | | | EFSA |
| 09.816 | Propyl octanoate | 624-13-5 | | 10892 | | | | EFSA |
| 09.818 | 3,7,11-Trimethyldodeca-2,6,10-trienyl acetate | 29548-30-9 | 1831 | | | | | EFSA |
| 09.819 | 3,5,5-Trimethylhexyl acetate | 58430-94-7 | | | | | | EFSA |
| 09.820 | Undecyl acetate | 1731-81-3 | | 10906 | | | | EFSA |
| 09.821 | Vetiveryl acetate | 117-98-6 | 1867 | 11887 | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.822 | iso-Propenyl acetate | 108-22-5 | 1835 | | | | | EFSA |
| 09.824 | Ethyl 2-acetylbutyrate | 607-97-6 | | | | | | EFSA |
| 09.825 | Pentyl benzoate | 2049-96-9 | | 2307 | | | | EFSA |
| 09.829 | Ethyl cyclohexyl acetate | 5452-75-5 | | 218 | | | | EFSA |
| 09.830 | Terpineol acetate | 8007-35-0 | 368 | 205 | | | | JECFA |
| 09.831 | Ethyl 3,7-dimethyl-2,6-octadienoate | 13058-12-3 | | | | | | EFSA |
| 09.832 | Ethyl 3-acetohexanoate | 21188-61-4 | | 10566 | | | | EFSA |
| 09.833 | iso-Propyl 4-oxopentanoate | 21884-26-4 | | | | | | EFSA |
| 09.835 | Benzyl decanoate | 42175-41-7 | | | | | | EFSA |
| 09.836 | 3-Phenylpropyl benzoate | 60045-26-3 | | | | | | EFSA |
| 09.837 | 3-Phenylpropyl 3-phenylpropionate | 60045-27-4 | | | | | | EFSA |
| 09.838 | (3Z)-Hexenyl methyl carbonate | 67633-96-9 | | | | | | EFSA |
| 09.839 | Decyl 3-methylbutyrate | 72928-48-4 | | | | | | EFSA |
| 09.840 | Propyl 2,4-decadienoate | 84788-08-9 | 1194 | 10889 | | | | EFSA |
| 09.841 | 2-Hexenyl octanoate | 85554-72-9 | 1796 | | | | 2 | EFSA |
| 09.842 | l-Menthol ethylene glycol carbonate | 156324-78-6 | 443 | | | | | JECFA |
| 09.843 | Menthol 1-and 2-propylene glycol carbonate | 30304-82-6 | | | | | 1 | EFSA |
| 09.846 | 3-Hexenyl formate | 2315-09-5 | 1272 | 2153 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------------|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.848 | (-)-bornyl acetate | 5655-61-8 | 1864 | | | | | EFSA |
| 09.850 | Ethyl trans-2-hexenoate | 27829-72-7 | 1808 | 631 | | | | EFSA |
| 09.852 | 2-Methylbutyl 2-hydroxybenzoate | 51115-63-0 | | | | | | EFSA |
| 09.854 | cis-3-Hexenyl 2-methylbutanoate | 53398-85-9 | | | | | 1 | EFSA |
| 09.855 | (3E)-Hexenyl hexanoate | 56922-82-8 | | | | | | EFSA |
| 09.858 | Phenylmethyl 2-methyl-2-butenolate | 67674-41-3 | | | | | 1 | EFSA |
| 09.862 | Ethyl 3-acetoxy octanoate | 85554-66-1 | | | | | | EFSA |
| 09.865 | Hexyl (9Z)-octadecenoate | 20290-84-0 | | | | | | EFSA |
| 09.866 | Allyl valerate | 6321-45-5 | | | | | 2 | EFSA |
| 09.870 | Carvyl-3-methylbutyrate | 94386-39-7 | | | | | | EFSA |
| 09.871 | Citronellyl decanoate | 72934-06-6 | | | | | | EFSA |
| 09.872 | Citronellyl dodecanoate | 72934-07-7 | | | | | | EFSA |
| 09.874 | Di(2-methylbutyl) malate | 253596-99-5 | | | | | | EFSA |
| 09.878 | Eugenyl isovalerate | 61114-24-7 | 1532 | | | | | EFSA |
| 09.880 | Hept-4-enyl-2 butyrate | 233666-01-8 | | | | | | EFSA |
| 09.884 | Hex-3-enyl-2-ethylbutyrate | 233666-04-1 | | | | | | EFSA |
| 09.885 | Hex-3-enyl hexadecanoate | 233666-03-0 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.888 | Isobornyl 2-methylbutyrate | 94200-10-9 | 1869 | | | | | EFSA |
| 09.893 | 2-Isopropyl-5-methylphenyl formate | 406700-80-9 | | | | | | EFSA |
| 09.894 | 2-Methoxy-4-(prop-1-enyl)phenyl 3-methylbutyrate | 61114-23-6 | | | | | | EFSA |
| 09.895 | 4-Methoxybenzyl-2-methylpropionate | 71172-26-4 | | | | | | EFSA |
| 09.897 | 3-Methylbut-3-en-1-yl butyrate | 54702-13-5 | | | | | | EFSA |
| 09.898 | 3-Methylbut-3-en-1-yl hexanoate | 53655-22-4 | | | | | | EFSA |
| 09.899 | Myrtenyl-2-methylbutyrate | 138530-44-6 | | | | | 2 | EFSA |
| 09.900 | Myrtenyl-3-methylbutyrate | 33900-84-4 | | | | | 2 | EFSA |
| 09.916 | Ethyl 3-hydroxyoctanoate | 7367-90-0 | | 10603 | | | | EFSA |
| 09.917 | 4-Pentenyl acetate | 1576-85-8 | 1270 | | | | | EFSA |
| 09.918 | cis-4-Decenyl acetate | 67452-27-1 | 1288 | | | | | EFSA |
| 09.919 | Ethyl 3-acetoxy-2-methylbutyrate | 139564-43-5 | 1718 | | | | | EFSA |
| 09.921 | Ethyl 5-hexenoate | 54653-25-7 | 1273 | | | | | EFSA |
| 09.922 | (4Z)-Ethylheptenoate | 39924-27-1 | 1281 | | | | | EFSA |
| 09.923 | Hept-2-yl butyrate | 39026-94-3 | 1144 | | | | | EFSA |
| 09.924 | 3-Heptyl acetate (mixture of R and S) | 5921-83-5 | 1143 | | | | | EFSA |
| 09.925 | Nonan-3-yl acetate | 60826-15-5 | 1145 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.926 | Octan-3-yl formate | 84434-65-1 | | | | | | EFSA |
| 09.927 | Rhodinyl butyrate | 141-15-1 | 68 | | At least 85%; secondary component 10-13% rhodinol | | | JECFA |
| 09.928 | (3E)-Hexenyl acetate | 3681-82-1 | | | | | | EFSA |
| 09.929 | L-Monomenthyl glutarate | 220621-22-7 | | | | | | EFSA |
| 09.930 | Cyclohexyl, 2-methylene-5-(1-methylethenyl) acetate | 71660-03-2 | 1098 | | | | | EFSA |
| 09.931 | 2,6-Dimethyl-2,5,7-octatriene-1-ol acetate | 999999-91-4 | 1226 | | | | 2 | EFSA |
| 09.932 | (5Z)-Octenylpropionate | 196109-18-9 | 1282 | | At least 93%; secondary components 2-3% (E)-5-Octenyl propionate and 0.5-1% (Z)-5-Octenol | | | EFSA |
| 09.933 | Ethyl vanillin isobutyrate | 188417-26-7 | 953 | | | | | EFSA |
| 09.934 | Methyl (5Z)-Octenoate | 41654-15-3 | 1630 | | | | | EFSA |
| 09.935 | Dimethyl glutarate | 406179-71-3 | | | | | | EFSA |
| 09.936 | 4,8-Dimethyl-3,7-nonadien-2-yl acetate | 91418-25-6 | 1847 | | | | 1 | EFSA |
| 09.937 | Methyl (3Z)-hexenoate | 13894-62-7 | 1624 | | | | | EFSA |
| 09.938 | 6-Methyl-5-hepten-2-yl acetate | 19162-00-6 | 1838 | | | | | EFSA |
| 09.939 | Ethyl (3Z)-hexenoate | 64187-83-3 | 1626 | | | | | EFSA |
| 09.940 | Rhodinyl isobutyrate | 138-23-8 | 74 | 592 | | | | JECFA |
| 09.942 | 2-Methylbutyl-3-methyl-2-butenate | 97890-13-6 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 09.943 | Guaiacol propionate | 7598-60-9 | | | | | | EFSA |
| 09.944 | Guaiacol butyrate | 4112-92-9 | | | | | | EFSA |
| 09.945 | Guaiacol isobutyrate | 723759-62-4 | | | | | | EFSA |
| 09.946 | Dihydrogalangal acetate | 129319-15-9 | | | | | | EFSA |
| 09.947 | (E,Z)-2,6-nonadienyl acetate | 68555-65-7 | 1188 | | | | 2 | JECFA/EFSA |
| 09.948 | (2E)-2-nonenyl acetate | 30418-89-4 | | | | | 2 | EFSA |
| 09.949 | L-Menthyl (S)-3-hydroxybutyrate | 115869-76-6 | | | | | | EFSA |
| 09.950 | Z-5-Octenyl acetate | 71978-00-2 | | | | | | EFSA |
| 09.951 | Bis(2-ethylhexyl)adipate (dioctyl adipate) | 123-79-5 | 1968 | | | | | EFSA |
| 10.001 | Nonano-1,4-lactone | 104-61-0 | 229 | 178 | | | | JECFA |
| 10.002 | Undecano-1,4-lactone | 104-67-6 | 233 | 179 | | | | JECFA |
| 10.003 | Hexadec-6-eno-1,16-lactone | 7779-50-2 | 240 | 180 | | | | JECFA |
| 10.004 | Pentadecano-1,15-lactone | 106-02-5 | 239 | 181 | | | | JECFA |
| 10.005 | 3-Propylidene-phthalide | 17369-59-4 | 1168 | 494 | | | | EFSA |
| 10.006 | Butyro-1,4-lactone | 96-48-0 | 219 | 615 | | | | JECFA |
| 10.007 | Decano-1,5-lactone | 705-86-2 | 232 | 621 | | | | JECFA |
| 10.008 | Dodecano-1,5-lactone | 713-95-1 | 236 | 624 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 10.009 | Dodec-6-eno-1,4-lactone | 18679-18-0 | 249 | 625 | | | | JECFA |
| 10.010 | Hexano-1,5-lactone | 823-22-3 | 224 | 641 | | | | JECFA |
| 10.011 | Undecano-1,5-lactone | 710-04-3 | 234 | 688 | | | | JECFA |
| 10.012 | 5-Methylfuran-2(3H)-one | 591-12-8 | 221 | 731 | | | | JECFA |
| 10.013 | Pentano-1,4-lactone | 108-29-2 | 220 | 757 | | | | JECFA |
| 10.014 | Nonano-1,5-lactone | 3301-94-8 | 230 | 2194 | | | | JECFA |
| 10.015 | Octano-1,5-lactone | 698-76-0 | 228 | 2195 | | | | JECFA |
| 10.016 | Tetradecano-1,5-lactone | 2721-22-4 | 238 | 2196 | | | | JECFA |
| 10.017 | Decano-1,4-lactone | 706-14-9 | 231 | 2230 | | | | JECFA |
| 10.018 | 4-Butyloctano-1,4-lactone | 7774-47-2 | 227 | 2231 | | | | JECFA |
| 10.019 | Dodecano-1,4-lactone | 2305-05-7 | 235 | 2240 | | | | JECFA |
| 10.020 | Heptano-1,4-lactone | 105-21-5 | 225 | 2253 | | | | JECFA |
| 10.021 | Hexano-1,4-lactone | 695-06-7 | 223 | 2254 | | | | JECFA |
| 10.022 | Octano-1,4-lactone | 104-50-7 | 226 | 2274 | | | | JECFA |
| 10.023 | 5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one | 698-10-2 | 222 | 2300 | | | 2 | JECFA/EFSA |
| 10.024 | 3-Butylidene-phthalide | 551-08-6 | 1170 | 10083 | | | | EFSA |
| 10.025 | 3-Butylphthalide | 6066-49-5 | 1169 | 10084 | | | | EFSA |
| 10.026 | 3-Heptyldihydro-5-methyl-2(3H)-furanone | 40923-64-6 | 244 | 10953 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 10.027 | 3,7-Dimethyloctano-1,6-lactone | 499-54-7 | 237 | 11833 | At least 90%; secondary component 5-6% 6-hydroxy-3,7-dimethyl-2-octenoic acid lactone | | | JECFA |
| 10.028 | Dodecano-1,6-lactone | 16429-21-3 | 242 | | | | | JECFA |
| 10.029 | Decano-1,6-lactone | 5579-78-2 | 241 | | | | | JECFA |
| 10.030 | 3-Hydroxy-4,5-dimethylfuran-2(5H)-one | 28664-35-9 | 243 | 11834 | | | 2 | JECFA/EFSA |
| 10.031 | 6-Pentyl-2H-pyran-2-one | 27593-23-3 | 245 | 10967 | | | | EFSA |
| 10.033 | Dec-7-eno-1,5-lactone | 34686-71-0 | 247 | | | | | JECFA |
| 10.034 | 5,6-Dihydro-3,6-dimethylbenzofuran-2(4H)-one | 80417-97-6 | 1163 | | | | 2 | EFSA |
| 10.035 | Undec-8-eno-1,5-lactone | 68959-28-4 | 248 | | | | | JECFA |
| 10.036 | 5,6,7,7a-Tetrahydro-3,6-dimethylbenzofuran-2(4H)-one | 13341-72-5 | 1162 | | | | 2 | EFSA |
| 10.037 | 5-Hydroxy-2-decenoic acid delta-lactone | 54814-64-1 | 246 | | | | | EFSA |
| 10.038 | Dec-7-eno-1,4-lactone | 67114-38-9 | | | | | | EFSA |
| 10.039 | cis-Dec-7-eno-1,4-lactone | 63095-33-0 | | | | | | EFSA |
| 10.040 | Dec-8-eno-1,5-lactone | 32764-98-0 | | | | | | EFSA |
| 10.042 | 3,4-Dimethyl-5-pentylidene-furan-2(5H)-one | 774-64-1 | | 11873 | At least 93%; secondary component 1-2% 3,4-dimethyl 5-ketobutanoic acid gamma-lactone | | 2 | EFSA |
| 10.043 | 2,7-Dimethylocta-5(trans),7-dieno-1,4-lactone | 78548-56-8 | | | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 10.044 | Dodec-2-eno-1,5-lactone | 16400-72-9 | 438 | | At least 88% 6-heptyl-5,6-dihydro-2H-pyran-2-one; secondary components 3-5% E-6-(3-heptenyl)-5,6-dihydro-2H-pyran-2-one and 1-2% 6-heptyl-3,6-dihydro-2H-pyran-2-one | | | EFSA |
| 10.045 | Heptano-1,5-lactone | 3301-90-4 | | 10660 | | | | EFSA |
| 10.046 | Hex-2-eno-1,4-lactone | 2407-43-4 | | | | | 2 | EFSA |
| 10.047 | Hexadecano-1,16-lactone | 109-29-5 | | | | | | EFSA |
| 10.048 | Hexadecano-1,4-lactone | 730-46-1 | | 10673 | | | | EFSA |
| 10.049 | Hexadecano-1,5-lactone | 7370-44-7 | | 10674 | | | | EFSA |
| 10.050 | Hexahydro-3,6-dimethyl-2(3H)-benzofuranone | 92015-65-1 | 1161 | | | | | EFSA |
| 10.051 | 5-Hexyl-5-methyldihydrofuran-2(3H)-one | 7011-83-8 | 250 | | | | | JECFA |
| 10.052 | 3-Methylnonano-1,4-lactone | 33673-62-0 | | | | | | EFSA |
| 10.053 | 3-Methyloctano-1,4-lactone | 39212-23-2 | 437 | 10535 | | | | JECFA |
| 10.054 | Non-2-eno-1,4-lactone | 21963-26-8 | | | | | 2 | EFSA |
| 10.055 | Pentano-1,5-lactone | 542-28-9 | | 10907 | | | | EFSA |
| 10.056 | Phthalide | 87-41-2 | | | | | | EFSA |
| 10.057 | 3a,4,5,7a-Tetrahydro-3,6-dimethylbenzofuran-2(3H)-one | 57743-63-2 | | | | | 2 | EFSA |
| 10.058 | Tridecano-1,5-lactone | 7370-92-5 | | 10902 | | | | EFSA |
| 10.059 | Hexadec-7-en-1,16-lactone | 123-69-3 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 10.060 | 2-Decen-1,4-lactone | 2518-53-8 | | | | | 2 | EFSA |
| 10.061 | cis-5-Hexenyldihydro-5-methylfuran-2(3H)-one | 70851-61-5 | 1159 | | | | | EFSA |
| 10.063 | Hexadec-9-en-1,16 lactone | 28645-51-4 | 1991 | | | | | EFSA |
| 10.066 | Furan-2(5H)-one | | | | | | 2 | EFSA |
| 10.068 | Pentadecano-1,14-lactone | 32539-85-8 | | | | | | EFSA |
| 10.069 | 3-Methyl gamma-decalactone | 67663-01-8 | 1158 | | At least 94% (sum of cis and trans isomers); secondary component 1-2% heptan-1-ol | | | EFSA |
| 10.070 | 4-Methyl-5-hexen-1,4-olide | 1073-11-6 | 1157 | | | | | EFSA |
| 10.072 | Dimethyl-3,6-benzo-2(3H)-furanone | 65817-24-5 | 1167 | | | | | EFSA |
| 10.168 | 5,6-Dimethyl-tetrahydro-pyran-2-one | 10413-18-0 | | | | | | EFSA |
| 10.169 | 5,6,7,7alpha-Tetrahydro-4,4,7alpha-trimethyl-2-(4H)-benzofuranone | 15356-74-8 | 1164 | | At least 90%; secondary components 3-5 % 2,9-dimethyl 3,8-decanedione, 3-5% 4-hydroxy-5,6-oxo- beta-ionone | | | EFSA |
| 10.170 | 5-Pentyl-3H-furan-2-one | 51352-68-2 | 1989 | | Mixture of 3H- and 5H-isomers (2:1) | | 2 | EFSA |
| 11.001 | 3-Methylbutylamine | 107-85-7 | 1587 | 512 | | | | EFSA |
| 11.002 | Isobutylamine | 78-81-9 | 1583 | 513 | | | | EFSA |
| 11.003 | Butylamine | 109-73-9 | 1582 | 524 | | | | EFSA |
| 11.004 | Propylamine | 107-10-8 | 1580 | 601 | | | | EFSA |
| 11.005 | sec-Butylamine | 13952-84-6 | 1584 | 707 | | | | EFSA |
| 11.006 | Phenethylamine | 64-04-0 | 1589 | 708 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 11.007 | 2-(4-Hydroxyphenyl)ethylamine | 51-67-2 | 1590 | 709 | | | | EFSA |
| 11.008 | 2-Aminoacetophenone | 551-93-9 | | 2041 | | | 4 | EFSA |
| 11.009 | Trimethylamine | 75-50-3 | 1610 | 10497 | | | | EFSA |
| 11.015 | Ethylamine | 75-04-7 | 1579 | 10477 | | | | EFSA |
| 11.016 | Hexylamine | 111-26-2 | 1588 | 10478 | | | | EFSA |
| 11.017 | N-Isopentylidene isopentylamine | 35448-31-8 | 1606 | | | | | EFSA |
| 11.018 | Isopropylamine | 75-31-0 | 1581 | 10480 | | | | EFSA |
| 11.020 | 2-Methylbutylamine | 96-15-1 | 1586 | 10484 | | | | EFSA |
| 11.021 | Pentylamine | 110-58-7 | 1585 | 11734 | | | | EFSA |
| 11.023 | Triethylamine | 121-44-8 | 1611 | 10496 | | | | EFSA |
| 11.025 | Trimethylamine oxide | 1184-78-7 | 1614 | 10494 | | | | EFSA |
| 11.026 | Tripopylamine | 102-69-2 | 1612 | 10495 | | | | EFSA |
| 12.001 | 3-(Methylthio)propionaldehyde | 3268-49-3 | 466 | 125 | | | | JECFA |
| 12.002 | Methyl 3-(methylthio)propionate | 13532-18-8 | 472 | 428 | | | | JECFA |
| 12.003 | Methanethiol | 74-93-1 | 508 | 475 | | | | JECFA |
| 12.004 | Allylthiol | 870-23-5 | 521 | 476 | At least 75%; secondary components 20-25% allyl disulfide and 5-7% allylsulfide | | | JECFA |
| 12.005 | Phenylmethanethiol | 100-53-8 | 526 | 477 | | | | JECFA |
| 12.006 | Dimethyl sulfide | 75-18-3 | 452 | 483 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.007 | Dibutyl sulfide | 544-40-1 | 455 | 484 | | | | JECFA |
| 12.008 | Diallyl disulfide | 2179-57-9 | 572 | 485 | At least 80%; secondary components 10-15% allyl sulfide and 5-7% allyl mercaptan | | | JECFA |
| 12.009 | Diallyl trisulfide | 2050-87-5 | 587 | 486 | At least 65%; secondary components 20-25% allyl disulfide, 5-7% allylsulfide and 5-7% allyl tetrasulfide | | 4 | JECFA |
| 12.010 | Butane-1-thiol | 109-79-5 | 511 | 526 | | | | JECFA |
| 12.012 | Diethyl disulfide | 110-81-6 | 1699 | 533 | | | | EFSA |
| 12.013 | Dimethyl trisulfide | 3658-80-8 | 582 | 539 | | | 4 | JECFA |
| 12.014 | Dipropyl disulfide | 629-19-6 | 566 | 540 | | | | JECFA |
| 12.015 | Dipropyl sulfide | 111-47-7 | | 541 | | | | SCF/CoE |
| 12.016 | Di-isopropyl sulfide | 625-80-9 | | 542 | | | | SCF/CoE |
| 12.017 | Ethanethiol | 75-08-1 | 1659 | 546 | | | | EFSA |
| 12.018 | S-Ethyl acetothioate | 625-60-5 | 483 | 11665 | | | | JECFA |
| 12.019 | Methyl propyl disulfide | 2179-60-4 | 565 | 585 | | | | JECFA |
| 12.020 | Methyl propyl trisulfide | 17619-36-2 | 584 | 586 | At least 45%; secondary components 25% dipropyl trisulfide, 12% dipropyl disulfide, 14% dimethyl disulfide and 3% methyl propyl sulfide | | 4 | JECFA |
| 12.021 | Allyl propyl disulfide | 2179-59-1 | 1700 | 600 | | | | EFSA |
| 12.022 | Butane-2,3-dithiol | 4532-64-3 | 539 | 725 | | | | JECFA |
| 12.023 | Dipropyl trisulfide | 6028-61-1 | 585 | 726 | | | 4 | JECFA |
| 12.024 | 3-Mercaptobutan-2-ol | 37887-04-0 | 546 | 760 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|--|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.025 | Allyl isothiocyanate | 57-06-7 | 1560 | 2110 | | | | EFSA |
| 12.026 | Dimethyl disulfide | 624-92-0 | 564 | 2175 | | | | JECFA |
| 12.027 | 2-Methylbenzene-1-thiol | 137-06-4 | 528 | 2272 | | | | JECFA |
| 12.028 | Dicyclohexyl disulfide | 2550-40-5 | 575 | 2320 | | | | JECFA |
| 12.029 | Cyclopentanethiol | 1679-07-8 | 516 | 2321 | | | | JECFA |
| 12.030 | 3-(Methylthio)propyl isothiocyanate | 505-79-3 | 1564 | 2326 | | | | EFSA |
| 12.031 | 3-Mercaptopentan-2-one | 67633-97-0 | 560 | 2327 | | | | JECFA |
| 12.032 | S-Methyl butanethioate | 2432-51-1 | 484 | 2328 | | | | JECFA |
| 12.033 | Naphthalene-2-thiol | 91-60-1 | 531 | 2330 | | | | JECFA |
| 12.034 | Octane-1,8-dithiol | 1191-62-4 | 541 | 2331 | | | | JECFA |
| 12.035 | 2-,3- and 10-Mercaptopinane | | 520 | 2332 | Mixture of isomers (about 54 % of 10-isomer, about 31 % of 2-isomer, about 10 % of 3-isomer) | | | JECFA |
| 12.036 | 3-[(2-Mercapto-1-methylpropyl)thio]butan-2-ol | 54957-02-7 | 547 | 2353 | | | | JECFA |
| 12.037 | Allyl methyl disulfide | 2179-58-0 | 568 | 11866 | At least 90%; secondary components 3-5% dimethyl sulfide and 3-5% diallyl sulfide | | | JECFA |
| 12.038 | 8-Mercapto-p-menthan-3-one | 38462-22-5 | 561 | 11789 | | | 2 | JECFA/EFSA |
| 12.039 | 2-Mercaptopropionic acid | 79-42-5 | 551 | 11790 | | | | JECFA |
| 12.040 | 2-Methylthioacetaldehyde | 23328-62-3 | 465 | 11686 | | | | JECFA |
| 12.041 | 1-(Methylthio)butan-2-one | 13678-58-5 | 496 | 11543 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.042 | 2-(Methylthio)phenol | 1073-29-6 | 503 | 11553 | | | | JECFA |
| 12.043 | Diphenyl disulfide | 882-33-7 | 578 | 11757 | | | | JECFA |
| 12.044 | Prop-1-enyl propyl disulfide | 5905-46-4 | 570 | 11699 | At least 92%; secondary component 3-6% dipropyl disulfide | | | JECFA |
| 12.045 | Methyl allyl trisulfide | 34135-85-8 | 586 | 11867 | At least 80%; secondary components 10-12% dimethyl trisulfide and 6-8% allyl trisulfide | | 4 | JECFA |
| 12.046 | Ethyl 2-mercaptopropionate | 19788-49-9 | 552 | 11469 | | | | JECFA |
| 12.047 | 3-Mercaptobutan-2-one | 40789-98-8 | 558 | 11497 | | | | JECFA |
| 12.048 | 2-Methylbutane-1-thiol | 1878-18-8 | 515 | 11509 | | | | JECFA |
| 12.049 | 3-Methylbutane-2-thiol | 2084-18-6 | 517 | 11510 | | | | JECFA |
| 12.052 | Di-(3-oxobutyl) sulfide | 40790-04-3 | 502 | 11441 | | | | JECFA |
| 12.053 | Ethyl 3-(methylthio)propionate | 13327-56-5 | 476 | 11476 | | | | JECFA |
| 12.054 | 2-(Ethylthio)phenol | 4500-58-7 | 529 | 11666 | | | | JECFA |
| 12.055 | 4-Mercaptobutan-2-one | 34619-12-0 | 559 | 11498 | | | | JECFA |
| 12.056 | 3-(Methylthio)butanal | 16630-52-7 | 467 | 11687 | | | | JECFA |
| 12.057 | 4-(Methylthio)butan-2-one | 34047-39-7 | 497 | 11688 | | | | JECFA |
| 12.058 | 4-(Methylthio)-4-methylpentan-2-one | 23550-40-5 | 500 | 11551 | | | | JECFA |
| 12.059 | Propyl thioacetate | 2307-10-0 | 485 | 11576 | | | | JECFA |
| 12.060 | Methyl 4-(methylthio)butyrate | 53053-51-3 | 474 | 11526 | | | | JECFA |
| 12.061 | 4-(Methylthio)butanal | 42919-64-2 | 468 | 11542 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.062 | 3-(Methylthio)propan-1-ol | 505-10-2 | 461 | 11554 | | | | JECFA |
| 12.063 | 3-(Methylthio)hexan-1-ol | 51755-66-9 | 463 | 11548 | | | | JECFA |
| 12.064 | Thioglycerinol | 39067-80-6 | 524 | 11583 | | | | JECFA |
| 12.065 | 2,8-dithianon-4-en-4-carboxaldehyde | 59902-01-1 | 471 | 11904 | | | 1 | EFSA |
| 12.066 | Ethane-1,2-dithiol | 540-63-6 | 532 | 11467 | | | | JECFA |
| 12.067 | Hexane-1,6-dithiol | 1191-43-1 | 540 | 11486 | | | | JECFA |
| 12.068 | Benzyl methyl disulfide | 699-10-5 | 577 | 11508 | | | | JECFA |
| 12.069 | Nonane-1,9-dithiol | 3489-28-9 | 542 | 11558 | | | | JECFA |
| 12.070 | Propane-1,2-dithiol | 814-67-5 | 536 | 11564 | | | | JECFA |
| 12.071 | 1-Propane-1-thiol | 107-03-9 | 509 | 11816 | | | | JECFA |
| 12.072 | Butane-1,2-dithiol | 16128-68-0 | 537 | 11909 | | | | JECFA |
| 12.073 | Butane-1,3-dithiol | 24330-52-7 | 538 | 11910 | | | | JECFA |
| 12.074 | Diallyl polysulfides | 72869-75-1 | 588 | 11912 | | | 4 | JECFA |
| 12.075 | Methyl prop-1-enyl disulfide | 5905-47-5 | 569 | 11712 | At least 90%; secondary components 4-5% methyl 1-dipropyl disulfide and 2-4% propenyl disulfide | | | JECFA |
| 12.076 | Propane-1,3-dithiol | 109-80-8 | 535 | 11929 | | | | JECFA |
| 12.077 | Benzyl methyl sulfide | 766-92-7 | 460 | | | | | EFSA |
| 12.078 | 4-(Methylthio)butan-1-ol | 20582-85-8 | 462 | | | | | JECFA |
| 12.079 | 2-(methylthiomethyl)but-2-enal | 40878-72-6 | 470 | 11549 | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.080 | Thiophenol | 108-98-5 | 525 | 11585 | | | | JECFA |
| 12.081 | Dibenzyl disulfide | 150-60-7 | 579 | | | | | JECFA |
| 12.082 | 2,6-(Dimethyl)thiophenol | 118-72-9 | 530 | | | | | JECFA |
| 12.083 | Ethyl 3-mercaptopropionate | 5466-06-8 | 553 | | | | | JECFA |
| 12.084 | Ethyl 4-(methylthio)butyrate | 22014-48-8 | 477 | | | | | JECFA |
| 12.085 | p-Menth-1-ene-8-thiol | 71159-90-5 | 523 | | | | 2 | EFSA |
| 12.086 | Methyl 2-(methylthio)butyrate | 51534-66-8 | 486 | | | | | JECFA |
| 12.087 | 2-(Methylthiomethyl)-3-phenylpropenal | 65887-08-3 | 505 | | | | | JECFA |
| 12.088 | Diallyl sulfide | 592-88-1 | 458 | 11846 | | | | EFSA |
| 12.089 | Ethyl 3-(methylthio)butyrate | | 480 | 11475 | | | | JECFA |
| 12.096 | Allyl methyl sulfide | 10152-76-8 | | 11429 | | | | EFSA |
| 12.098 | Allyl prop-1-enyl disulfide | 33368-82-0 | | 11433 | | | | EFSA |
| 12.099 | Allyl propyl sulfide | 27817-67-0 | | 11434 | | | | EFSA |
| 12.101 | Allyl thiopropionate | 41820-22-8 | 490 | 11436 | At least 83%; secondary component 15-18% diallyl sulfide | | | JECFA |
| 12.102 | Benzyl isothiocyanate | 622-78-6 | 1562 | 11863 | | | | EFSA |
| 12.103 | Butane-1,4-dithiol | 1191-08-8 | | | | | | EFSA |
| 12.104 | Butane-2-thiol | 513-53-1 | | | | | | EFSA |
| 12.106 | S-2-Butyl 3-methylbutanethioate | 2432-91-9 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.107 | Butyl isothiocyanate | 592-82-5 | 1561 | 11488 | | | | EFSA |
| 12.108 | Di-isopentyl thiomalate | 68084-03-7 | 1672 | 11454 | | | | EFSA |
| 12.109 | Di-isopropyl disulfide | 4253-89-8 | 567 | 11455 | | | | JECFA |
| 12.111 | Dibutyl disulfide | 629-45-8 | | | | | | EFSA |
| 12.113 | Diethyl sulfide | 352-93-2 | 454 | 11450 | | | | JECFA |
| 12.114 | Diethyl trisulfide | 3600-24-6 | 1701 | 11451 | | | 4 | EFSA |
| 12.117 | Dipentyl sulfide | 872-10-6 | | | | | | EFSA |
| 12.118 | 2,4-Dithiapentane | 1618-26-4 | 533 | | | | | JECFA |
| 12.120 | 2,8-Epithio-p-menthane | 68398-18-5 | 1685 | | | | 4 | EFSA |
| 12.121 | Ethyl 2-(methylthio)propionate | 23747-43-5 | 581 | 11471 | | | | JECFA |
| 12.122 | Ethyl 2-(methylthio)acetate | 4455-13-4 | 475 | | | | | JECFA |
| 12.124 | Ethyl butyl sulfide | 638-46-0 | | | | | | EFSA |
| 12.125 | Ethyl propanethioate | 2432-42-0 | | | | | | EFSA |
| 12.126 | Ethyl propyl disulfide | 30453-31-7 | 1694 | 11478 | | | | EFSA |
| 12.127 | Ethyl propyl sulfide | 4110-50-3 | | 11479 | | | | EFSA |
| 12.128 | 2-Ethylhexane-1-thiol | 7341-17-5 | 519 | | | | | JECFA |
| 12.129 | 3-(Ethylthio)propan-1-ol | 18721-61-4 | | | | | | EFSA |
| 12.130 | Heptane-1-thiol | 1639-09-4 | 1663 | 11485 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------------|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.132 | Hexane-1-thiol | 111-31-9 | 518 | 11487 | | | | JECFA |
| 12.134 | S-Isopropyl 3-methylbut-2-enethioate | 34365-79-2 | 1679 | | | | | EFSA |
| 12.135 | 3-Mercapto-2-methylpropionic acid | 26473-47-2 | | | | | | EFSA |
| 12.136 | 3-Mercapto-2-oxopropionic acid | 2464-23-5 | | | | | | EFSA |
| 12.137 | 3-Mercapto-3-methylbutan-1-ol | 34300-94-2 | 544 | | | | 2 | EFSA |
| 12.138 | 3-Mercapto-3-methylbutyl formate | 50746-10-6 | 549 | | | | 2 | EFSA |
| 12.139 | 2-Mercaptoanisole | 7217-59-6 | 1666 | 11880 | | | | EFSA |
| 12.143 | 1-Mercaptopropan-2-one | 24653-75-6 | 557 | | | | | JECFA |
| 12.145 | 4-Methoxy-2-methylbutane-2-thiol | 94087-83-9 | 548 | | | | 2 | EFSA |
| 12.146 | Methyl (methylthio)acetate | 16630-66-3 | 1691 | 11525 | | | | EFSA |
| 12.148 | S-Methyl 4-methylpentanethioate | 61122-71-2 | 488 | | | | | JECFA |
| 12.149 | S-Methyl acetothioate | 1534-08-3 | 482 | | | | | JECFA |
| 12.150 | S-Methyl benzothioate | 5925-68-8 | 504 | 11505 | | | | JECFA |
| 12.151 | Methyl butyl disulfide | 60779-24-0 | | | | | | EFSA |
| 12.152 | Methyl butyl sulfide | 628-29-5 | | | | | | EFSA |
| 12.153 | Methyl ethyl disulfide | 20333-39-5 | 1693 | 11470 | At least 80%, secondary components 7-8% diethyl sulfide and 8-10% dimethyl sulfide | | | EFSA |
| 12.154 | Methyl ethyl sulfide | 624-89-5 | 453 | 11474 | | | | JECFA |
| 12.155 | Methyl ethyl trisulfide | 31499-71-5 | 583 | | | | 4 | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-----------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.156 | S-Methyl hexanethioate | 20756-86-9 | 489 | 11515 | | | | JECFA |
| 12.157 | S-Methyl isopentanethioate | 23747-45-7 | 487 | 11506 | | | | JECFA |
| 12.158 | Methyl 3-methyl-2-butenylsulphide | 5897-45-0 | | | | | | EFSA |
| 12.159 | Methyl methanethiosulfonate | 2949-92-0 | | 11520 | | | 3 | EFSA |
| 12.161 | Methyl phenyl disulfide | 14173-25-2 | 576 | 11532 | | | | JECFA |
| 12.162 | Methyl phenyl sulfide | 100-68-5 | 459 | 11533 | | | | EFSA |
| 12.163 | Methyl prop-1-enyl sulfide | 10152-77-9 | | 11538 | | | | EFSA |
| 12.165 | S-Methyl propanethioate | 5925-75-7 | 1678 | | | | | EFSA |
| 12.166 | Methyl propyl sulfide | 3877-15-4 | | 11541 | | | | EFSA |
| 12.168 | 2-Methyl-2-(methyldithio)propanal | 67952-60-7 | 580 | | | | | JECFA |
| 12.169 | 2-Methyl-4-oxopentane-2-thiol | 19872-52-7 | 1293 | 11500 | 48% 2-methyl-4-oxopentane-2-thiol and 48-50% 4-methyl-3-penten-2-one. | | 2 | EFSA |
| 12.170 | 3-Methylbut-2-ene-1-thiol | 5287-45-6 | 522 | 11511 | | | | JECFA |
| 12.171 | 3-Methylbutane-1-thiol | 541-31-1 | 513 | | | | | JECFA |
| 12.173 | 2-Methylpropane-1-thiol | 513-44-0 | 512 | 11536 | | | | JECFA |
| 12.175 | Methylsulfinylmethane | 67-68-5 | 507 | | | | | JECFA |
| 12.176 | 4-(Methylthio)-2-oxobutyric acid | 583-92-6 | 501 | | | | | JECFA |
| 12.177 | 8-(Methylthio)-p-menthan-3-one | 32637-94-8 | | | | | | EFSA |
| 12.178 | 3-(Methylthio)butyric acid | 16630-65-2 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.179 | 2-(Methylthio)ethan-1-ol | 5271-38-5 | 1297 | 11545 | | | | EFSA |
| 12.180 | 1-(Methylthio)ethane-1-thiol | 31331-53-0 | | | | | | EFSA |
| 12.181 | 1-(Methylthio)pentan-3-one | 66735-69-1 | | | | | | EFSA |
| 12.182 | 2-(Methylthio)propionic acid | 58809-73-7 | | | | | | EFSA |
| 12.183 | 3-(Methylthio)propionic acid | 646-01-5 | | | | | | EFSA |
| 12.187 | Methylthiomethyl butyrate | 74758-93-3 | 473 | | | | | JECFA |
| 12.188 | Methylthiomethyl hexanoate | 74758-91-1 | 479 | | | | | JECFA |
| 12.189 | S-(Methylthiomethyl) 2-methylpropane-thioate | 77974-85-7 | | | | | | EFSA |
| 12.191 | Pentane-1-thiol | 110-66-7 | 1662 | | | | | EFSA |
| 12.192 | Pentane-2-thiol | 2084-19-7 | 514 | | | | | JECFA |
| 12.193 | Phenethyl isothiocyanate | 2257-09-2 | 1563 | 11495 | | | | EFSA |
| 12.194 | 2-Phenylethane-1-thiol | 4410-99-5 | 527 | 11561 | | | | JECFA |
| 12.195 | S-Prenyl thioacetate | 33049-93-3 | 491 | | | | | JECFA |
| 12.196 | S-Prenyl thioisobutyrate | 53626-94-1 | | | | | | EFSA |
| 12.197 | Propane-2-thiol | 75-33-2 | 510 | 11565 | | | | JECFA |
| 12.198 | 2,3,5-Trithiahexane | 42474-44-2 | 1299 | | | | | EFSA |
| 12.200 | 1,1-bis(Ethylthio)-ethane | 14252-42-7 | | | | | | EFSA |
| 12.201 | 8-Acetylthio-p-menthanone-3 | 94293-57-9 | 506 | | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.203 | Methylthio 2-(acetyloxy)propionate | 74586-09-7 | 492 | | | | | JECFA |
| 12.205 | Mercaptoacetaldehyde | 4124-63-4 | | | | | | EFSA |
| 12.211 | But-1-enyl methyl sulphide | | 457 | | | | | JECFA |
| 12.212 | Ethyl-5-(methylthio)valerate | 233665-98-0 | 1298 | | | | | EFSA |
| 12.214 | Isobutyl-3-(methylthio)butyrate | 127931-21-9 | 1677 | | | | | EFSA |
| 12.217 | 3-Mercaptohexan-1-ol | | 545 | | | | | JECFA |
| 12.218 | Methyl-3-methyl-1-butenyl disulphide | | 571 | | | | | JECFA |
| 12.221 | S-Prenyl thioisopentanoate | 75631-91-3 | | | | | | EFSA |
| 12.227 | Methylthio-2-(propionyloxy)propionate | | 493 | | | | | JECFA |
| 12.234 | 3-Mercaptohexyl acetate | 136954-20-6 | 554 | | At least 82%; secondary components 8% 3-mercaptohexanol and 10% 3-acetylmercaptohexyl acetate | | | JECFA |
| 12.235 | 3-Mercaptohexyl butyrate | 136954-21-7 | 555 | | At least 90%; secondary component 5-6% 3-mercaptohexanol | | | JECFA |
| 12.236 | 3-(Methylthio)hexyl acetate | 51755-85-2 | 481 | | | | | JECFA |
| 12.237 | 3-(Methylthio)propyl acetate | 16630-55-0 | 478 | | | | | JECFA |
| 12.238 | 3-Mercapto-2-methylpentan-1-ol | 227456-27-1 | 1291 | | | | | EFSA |
| 12.239 | 3-Mercapto-2-methylpentanal | 227456-28-2 | 1292 | | | | | EFSA |
| 12.240 | 2,4,6-Trithiaheptane | 6540-86-9 | 1684 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------------------------------------|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.241 | 2-Mercapto-2-methylpentan-1-ol | 258823-39-1 | 1290 | | | | 2 | EFSA |
| 12.242 | Methylthiomethylmercaptan | 29414-47-9 | 1675 | | | | | EFSA |
| 12.243 | Dimercaptomethane | 6725-64-0 | 1661 | | | | | EFSA |
| 12.244 | 1-Methylthio-2-propanone | 14109-72-9 | 495 | | | | | JECFA |
| 12.250 | 3-Mercaptohexanal | 51755-72-7 | | | | | | EFSA |
| 12.251 | 3-Mercaptohexyl hexanoate | 136954-22-8 | 556 | | | | | JECFA |
| 12.252 | 4-Mercapto-4-methyl-2-pentanol | 31539-84-1 | 1669 | | | | 2 | EFSA |
| 12.253 | Amyl methyl disulfide | 72437-68-4 | 1697 | | | | | EFSA |
| 12.254 | Butyl ethyl disulfide | 63986-03-8 | 1698 | | At least 90%, secondary components 2-3% diethyl disulfide and 5-6% dibutyl disulfide | | | EFSA |
| 12.255 | Ethyl 3-mercaptopbutyrate | 156472-94-5 | 1294 | | | | | EFSA |
| 12.256 | Ethyl propyl trisulfide | 31499-70-4 | 1695 | | | | 4 | EFSA |
| 12.257 | Ethyl 4-(acetylthio)butyrate | 104228-51-5 | 1295 | | | | | EFSA |
| 12.259 | 1-Mercapto-p-menthan-3-one | 29725-66-4 | 1673 | | At least 89%, secondary components 8-9% piperitone and 1-2% alpha-terpineol | | 2 | EFSA |
| 12.264 | 4,2-Thiopentanone | 92585-08-5 | 1670 | | | | | EFSA |
| 12.265 | (E)-2-Methyl-1-methylthio-2-butene | 89534-74-7 | 1683 | | | | | EFSA |
| 12.266 | Methyl-2-mercaptopropionate | 53907-46-3 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|---------------------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.267 | Propyl-2-mercaptopropionate | 19788-50-2 | 1667 | | | | | EFSA |
| 12.272 | Propyl propanethiosulfonate | 1113-13-9 | 1702 | | | | 3 | EFSA |
| 12.273 | 3-(Methyl thio)heptanal | 51755-70-5 | 1692 | | At least 92%; secondary component 2-(E)-heptenal | | | EFSA |
| 12.274 | 3,6-Diethyl-1,2,4,5-tetrathiane and 3,5-diethyl-1,2,4-trithiolane mix in vegetable oil triglycerides | 54644-28-9, 54717-12-3 | 1687 | | 0.18% 3,6-diethyl-1,2,4,5-tetrathiane isomer I+ II; 0.05% 3,5-diethyl-1,2,4-trithiolane isomer I; 0.1% 3,5-diethyl-1,2,4-trithiolane isomer II; 99% vegetable oil triglyceride | | | EFSA |
| 12.275 | Allyl thiohexanoate | 156420-69-8 | 1681 | | | | | EFSA |
| 12.276 | (S)-1-Methoxy-3-heptanethiol | 400052-49-5 | 1671 | | | | | EFSA |
| 12.277 | 3-(Methylthio)propyl butyrate | 16630-60-7 | | | | | | EFSA |
| 12.278 | 3-Acetyl-mercaptohexyl acetate | 136954-25-1 | | | | | | EFSA |
| 12.279 | 3-Methylthiohexanal | 38433-74-8 | 469 | | | | | JECFA |
| 12.280 | Diisopropyl trisulphide | 5943-34-0 | 1300 | | | | 4 | EFSA |
| 12.282 | (S)-Methyl octanethioate | 2432-83-9 | | | | | | EFSA |
| 12.283 | 3-Butenyl isothiocyanate | 3386-97-8 | 1889 | | | | | EFSA |
| 12.284 | bis(1-Mercaptopropyl)sulphide | 53897-60-2 | 1709 | | | | | EFSA |
| 12.285 | 3-Methylthio-2-butanone | 53475-15-3 | 1688 | | | | | EFSA |
| 12.286 | 4-Methylthio-2-pentanone | 143764-28-7 | 1689 | | | | | EFSA |
| 12.287 | Methyl 3-(methylthio)butanoate | 207983-28-6 | 1690 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------------|--|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.288 | Heptan-2-thiol | 628-00-2 | 1664 | | | | | EFSA |
| 12.289 | 1-Phenylethylmercaptan | 6263-65-6 | 1665 | | | | | EFSA |
| 12.290 | Methyl-3-mercaptoputanoate | 54051-19-3 | 1674 | | | | | EFSA |
| 12.291 | 3-Mercapto-2-methyl-1-butanol | 227456-33-9 | 1289 | | | | | EFSA |
| 12.292 | Hexyl 3-mercaptoputanoate | 796857-79-9 | 1704 | | | | | EFSA |
| 12.293 | Ethane-1,1-dithiol | 69382-62-3 | 1660 | | 1% solution of ethane-1,1-dithiol, solvent 95% ethanol | | | EFSA |
| 12.294 | Isopentyl methyl disulfide | 72437-56-0 | 1696 | | | | | EFSA |
| 12.297 | 3-Mercaptoheptyl acetate | 548774-80-7 | 1708 | | | | | EFSA |
| 12.298 | Di-(1-propenyl)-sulfid (mixture) | 65819-74-1, 37981-37-6, 37981-36-5 | | | | | | EFSA |
| 12.299 | 3-(Methylthio)propyl hexanoate | 906079-63-8 | | | | | | EFSA |
| 12.300 | 1,1-Propanedithiol | 88497-17-0 | | | | | | EFSA |
| 12.301 | Methyl-2-oxo-propyl disulfide | 122861-78-3 | | | At least 90%, secondary components 1-mercaptopropan-2-one (less than 8%), 1,1-disulfanediyldipropan-2-one (less than 5%) and 1,3-dimethyltrisulfane (less than 3%) | | | EFSA |
| 12.302 | 2-Butanol, 4-mercapto-3-methyl | 33959-27-2 | | | | | | EFSA |
| 12.303 | 3-Pentanethiol | 616-31-9 | | | | | | EFSA |
| 12.304 | Ethyl-2-mercapto-2-methyl propanoate | 33441-50-8 | | | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|--------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 12.305 | 2-Mercapto-4-heptanol | 1006684-20-3 | | | | | | EFSA |
| 12.306 | 3-(Methylthio)-decanal | 1256932-15-6 | | | | | | EFSA |
| 13.001 | 5-Methylfurfural | 620-02-0 | 745 | 119 | | | | EFSA |
| 13.002 | Methyl 2-furoate | 611-13-2 | 746 | 358 | | | | EFSA |
| 13.003 | Propyl 2-furoate | 615-10-1 | 747 | 359 | | | | EFSA |
| 13.004 | Allyl 2-furoate | 4208-49-5 | 21 | 360 | | | 2 | EFSA |
| 13.005 | Hexyl 2-furoate | 39251-86-0 | 749 | 361 | | | | EFSA |
| 13.006 | Phenethyl 2-furoate | 7149-32-8 | 1517 | 362 | | | | EFSA |
| 13.007 | 2-(3-Phenylpropyl)tetrahydrofuran | 3208-40-0 | 1441 | 489 | | | | EFSA |
| 13.009 | 3,4-Dihydrocoumarin | 119-84-6 | 1171 | 535 | | | | EFSA |
| 13.010 | 4-Hydroxy-2,5-dimethylfuran-3(2H)-one | 3658-77-3 | 1446 | 536 | | | 1 | EFSA |
| 13.011 | (E)-Ethyl furfuracrylate | 623-20-1 | | 545 | | | | EFSA |
| 13.012 | 6-Methylcoumarin | 92-48-8 | 1172 | 579 | | | | EFSA |
| 13.015 | bis-(2,5-Dimethyl-3-furyl) disulfide | 28588-73-0 | 1067 | 722 | | | | EFSA |
| 13.016 | bis-(2-Methyl-3-furyl) disulfide | 28588-75-2 | 1066 | 723 | | | | EFSA |
| 13.017 | bis-(2-Methyl-3-furyl) tetrasulfide | 28588-76-3 | 1068 | 724 | | | | EFSA |
| 13.018 | Furfural | 98-01-1 | 450 | 2014 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.019 | Furfuryl alcohol | 98-00-0 | 451 | 2023 | | | | EFSA |
| 13.020 | Tetrahydrofurfuryl alcohol | 97-99-4 | 1443 | 2029 | | | | EFSA |
| 13.021 | Isopentyl 4-(2-furan)butyrate | 7779-66-0 | 1516 | 2080 | | | | EFSA |
| 13.022 | Ethyl 3(2-furyl)propionate | 10031-90-0 | 1513 | 2091 | | | | EFSA |
| 13.023 | Isopentyl 3-(2-furan)propionate | 7779-67-1 | 1515 | 2092 | | | | EFSA |
| 13.024 | Isobutyl 3-(2-furyl)propionate | 105-01-1 | 1514 | 2093 | | | | EFSA |
| 13.025 | Pentyl 2-furoate | 1334-82-3 | 748 | 2109 | | | | EFSA |
| 13.026 | 2-Furanmethanethiol | 98-02-2 | 1072 | 2202 | | | | EFSA |
| 13.027 | 2-Pentyl-5 or 6-keto-1,4-dioxane | 65504-96-3 | 1485 | 2205 | | | | EFSA |
| 13.028 | 2-Butyl-5 or 6-keto-1,4-dioxane | 65504-45-2 | 1484 | 2206 | | | | EFSA |
| 13.029 | 2,5-Dimethylfuran | 625-86-5 | 1488 | 2208 | | | 3 | EFSA |
| 13.030 | 2-Methylfuran | 534-22-5 | 1487 | 2209 | | | 3 | EFSA |
| 13.031 | 2-Benzofurancarboxaldehyde | 4265-16-1 | 751 | 2247 | | | | EFSA |
| 13.032 | Furfuryl isopropyl sulfide | 1883-78-9 | 1077 | 2248 | | | | EFSA |
| 13.033 | S-Furfuryl acetothioate | 13678-68-7 | 1074 | 2250 | | | | EFSA |
| 13.034 | 3-(2-furyl)acrylaldehyde | 623-30-3 | 1497 | | | | 1 | EFSA |
| 13.037 | 2-(2-Methylprop-1-enyl)-4-methyltetrahydropyran | 16409-43-1 | 1237 | 2269 | | | | EFSA |
| 13.038 | 2-Phenyl-3-carbethoxyfuran | 50626-02-3 | 752 | 2309 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|-------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.039 | 2,4,5-Trimethyl-delta-3-oxazoline | 22694-96-8 | 1559 | 2319 | | | | EFSA |
| 13.040 | (S)-2,5-dimethyl-3-thiofuroylfuran | 65505-16-0 | 1071 | 2323 | | | | EFSA |
| 13.041 | 2,5-Dimethyl-3-(isopentylthio)furan | 55764-28-8 | 1070 | 2324 | | | | EFSA |
| 13.042 | 4,5-Dihydro-2-methylfuran-3(2H)-one | 3188-00-9 | 1448 | 2338 | | | | EFSA |
| 13.043 | Furfurylidene-2-butanal | 770-27-4 | 1501 | 11885 | | | 1 | EFSA |
| 13.044 | 4-(2-Furyl)but-3-en-2-one | 623-15-4 | 1511 | 11838 | | | 1 | EFSA |
| 13.045 | 1-(2-Furyl)propan-2-one | 6975-60-6 | 1508 | 11837 | | | 4 | EFSA |
| 13.046 | 3-(2-Furyl)-2-methylprop-2-enal | 874-66-8 | 1498 | 11878 | | | 1 | EFSA |
| 13.047 | Propyl 3-(2-furyl)acrylate | 623-22-3 | 1518 | 11842 | | | | EFSA |
| 13.048 | Tetrahydrofurfuryl butyrate | 2217-33-6 | 1444 | 11841 | | | | EFSA |
| 13.049 | Tetrahydrofurfuryl propionate | 637-65-0 | 1445 | 11843 | | | | EFSA |
| 13.050 | Difurfuryl disulfide | 4437-20-1 | 1081 | 11480 | | | | EFSA |
| 13.051 | S-Furfuryl thioformate | 59020-90-5 | 1073 | 11770 | | | | EFSA |
| 13.052 | Furfuryl methyl ether | 13679-46-4 | 1520 | 10944 | | | 4 | EFSA |
| 13.053 | Methyl furfuryl sulfide | 1438-91-1 | 1076 | 11482 | | | | EFSA |
| 13.054 | 2-Acetylfuran | 1192-62-7 | 1503 | | | | 4 | EFSA |
| 13.055 | 2-Methylfuran-3-thiol | 28588-74-1 | 1060 | 11678 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.056 | Difurfuryl sulfide | 13678-67-6 | 1080 | 11438 | | | 4 | EFSA |
| 13.057 | Furfuryl isovalerate | 13678-60-9 | 743 | 10642 | | | | EFSA |
| 13.058 | 3-(5-Methyl-2-furyl) butanal | 31704-80-0 | 1500 | 10355 | | | 4 | EFSA |
| 13.059 | 2-Pentylfuran | 3777-69-3 | 1491 | 10966 | | | 3 | EFSA |
| 13.060 | Tetrahydrofurfuryl cinnamate | 65505-25-1 | 1447 | 11821 | | | | EFSA |
| 13.061 | Difurfuryl ether | 4437-22-3 | 1522 | 10930 | | | 4 | EFSA |
| 13.062 | Furfuryl propionate | 623-19-8 | 740 | 10646 | | | | EFSA |
| 13.063 | S-Furfuryl propanethioate | 59020-85-8 | 1075 | 11484 | | | | EFSA |
| 13.064 | Methyl furfuryl disulfide | 57500-00-2 | 1078 | 11513 | | | | EFSA |
| 13.065 | 2-Methyl-5-(methylthio)furan | 13678-59-6 | 1062 | 11550 | | | | EFSA |
| 13.066 | 3-Acetyl-2,5-dimethylfuran | 10599-70-9 | 1506 | 10921 | | | 4 | EFSA |
| 13.067 | Furfuryl octanoate | 39252-03-4 | 742 | 10645 | | | | EFSA |
| 13.068 | Furfuryl valerate | 36701-01-6 | 741 | 10647 | | | | EFSA |
| 13.069 | 2-Heptylfuran | 3777-71-7 | 1492 | 10952 | | | 3 | EFSA |
| 13.070 | 2-Hexanoylfuran | 14360-50-0 | 1512 | 11180 | | | 4 | EFSA |
| 13.071 | 2,5-Dimethylfuran-3-thiol | 55764-23-3 | 1063 | 11457 | | | | EFSA |
| 13.072 | 1,5,5,9-Tetramethyl-13-oxatricyclo [8.3.0.0.(4.9)]tridecane | 3738-00-9 | 1240 | 10514 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.073 | Octyl 2-furoate | 39251-88-2 | 750 | 10864 | | | | EFSA |
| 13.074 | 2,3-Dimethylbenzofuran | 3782-00-1 | 1495 | 11913 | | | | EFSA |
| 13.075 | 2,6-Dimethyl-3-((2-methyl-3-furyl)thio)heptan-4-one | 61295-51-0 | 1086 | 11915 | At least 94%; secondary component at least 1% 2,6-dimethyl-2-[(2-methyl-3-furyl)thio]-4-heptanone | | | EFSA |
| 13.076 | 6-Hydroxydihydrotheaspirane | 65620-50-0 | 1648 | 11917 | | | 2 | EFSA |
| 13.077 | 3-((2-Methyl-3-furyl)thio)heptan-4-one | 61295-41-8 | 1085 | 11922 | | | | EFSA |
| 13.078 | 4-((2-Methyl-3-furyl)thio)nonan-5-one | 61295-50-9 | 1087 | 11923 | | | | EFSA |
| 13.079 | Methyl 2-methyl-3-furyl disulfide | 65505-17-1 | 1064 | 11924 | | | | EFSA |
| 13.082 | Propyl 2-methyl-3-furyl disulfide | 61197-09-9 | 1065 | | | | | EFSA |
| 13.083 | 2-Acetyl-5-methylfuran | 1193-79-9 | 1504 | 11038 | | | 4 | EFSA |
| 13.084 | 2-Ethyl-4-hydroxy-5-methyl-3(2H)-furanone | 27538-09-6 | 1449 | | | | 1 | EFSA |
| 13.085 | 4-Hydroxy-5-methylfuran-3(2H)-one | 19322-27-1 | 1450 | 11785 | | | 1 | EFSA |
| 13.086 | 4,5-Dihydro-2-methyl-3-thioacetoxy-furan | 26486-14-6 | 1089 | | | | | EFSA |
| 13.087 | 6-Acetoxydihydrotheaspirane | 57893-27-3 | 1647 | | | | 2 | EFSA |
| 13.088 | 3,6-Dihydro-4-methyl-2-(2-methylprop-1-en-1-yl)-2H-pyran | 1786-08-9 | 1235 | | | | | EFSA |
| 13.089 | 2,5-Dimethyl-4-methoxyfuran-3(2H)-one | 4077-47-8 | 1451 | | | | 2 | EFSA |
| 13.090 | 2,2-Dimethyl-5-(1-methylprop-1-enyl)tetrahydrofuran | 7416-35-5 | 1452 | 10937 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.091 | 4,5-Dimethyl-2-ethyloxazole | 53833-30-0 | 1555 | | | | | EFSA |
| 13.092 | 2-Ethylfuran | 3208-16-0 | 1489 | 11706 | | | 3 | EFSA |
| 13.093 | Ethyl 3-(2-furfurylthio)propionate | 94278-27-0 | 1088 | | | | | EFSA |
| 13.094 | 2,6,6-Trimethyl-2-vinyltetrahydropyran | 7392-19-0 | 1236 | 10976 | | | | EFSA |
| 13.095 | 2,5-Diethyltetrahydrofuran | 41239-48-9 | 1453 | 11882 | | | | EFSA |
| 13.097 | Anhydrolinalool oxide (5) | 13679-86-2 | 1455 | 11944 | | | 2 | EFSA |
| 13.098 | Theaspirane | 36431-72-8 | 1238 | 10515 | | | | EFSA |
| 13.099 | 4-Acetoxy-2,5-dimethylfuran-3(2H)-one | 4166-20-5 | 1456 | | | | 1 | EFSA |
| 13.101 | 2-Acetyl-3,5-dimethylfuran | 22940-86-9 | 1505 | | | | 4 | EFSA |
| 13.102 | Butyl 2-furoate | 583-33-5 | | | | | | EFSA |
| 13.103 | 2-Butylfuran | 4466-24-4 | 1490 | 10927 | | | 3 | EFSA |
| 13.105 | 2-Butyrylfuran | 4208-57-5 | 1507 | | | | 4 | EFSA |
| 13.106 | 2-Decylfuran | 83469-85-6 | 1493 | | | | 3 | EFSA |
| 13.108 | 4,5-Dihydro-3-mercapto-2-methylfuran | 26486-13-5 | | | | | | EFSA |
| 13.112 | 4,5-Dimethyl-2-propyloxazole | 53833-32-2 | 1569 | 11379 | | | | EFSA |
| 13.113 | 2,5-Dimethyl-3-(methyldithio)furan | 61197-06-6 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.114 | 2,5-Dimethyl-3-(methylthio)furan | 63359-63-7 | | | | | | EFSA |
| 13.115 | 2,4-Dimethyl-3-oxazoline | 77311-02-5 | 1558 | | | | | EFSA |
| 13.116 | 2,5-Dimethyl-3-thioacetoxyfuran | 55764-22-2 | 1523 | | | | | EFSA |
| 13.117 | 2,5-Dimethyl-4-ethoxyfuran-3(2H)-one | 65330-49-6 | | | | | 2 | EFSA |
| 13.118 | 2,5-Dimethyl-4-ethyloxazole | 30408-61-8 | 1554 | | | | | EFSA |
| 13.119 | 2,5-Dimethylfuran-3(2H)-one | 14400-67-0 | | 11066 | | | 2 | EFSA |
| 13.120 | 2,5-Dimethyltetrahydrofuran | 1003-38-9 | | | | | | EFSA |
| 13.122 | Ethyl 2-furoate | 614-99-3 | | 10588 | | | | EFSA |
| 13.123 | Ethyl furfuryl ether | 6270-56-0 | 1521 | 10940 | | | 4 | EFSA |
| 13.124 | Ethyl furfuryl sulfide | 2024-70-6 | | | | | | EFSA |
| 13.125 | 2-Ethyl-5-methylfuran | 1703-52-2 | | 10942 | | | 3 | EFSA |
| 13.127 | Furfuryl 2-methylbutyrate | 13678-61-0 | | 10643 | | | | EFSA |
| 13.128 | Furfuryl acetate | 623-17-6 | 739 | 2065 | | | | EFSA |
| 13.129 | Furfuryl but-2(E)-enoate | 59020-84-7 | | | | | | EFSA |
| 13.130 | Furfuryl butyrate | 623-21-2 | 759 | 638 | | | | EFSA |
| 13.132 | Furfuryl hexanoate | 39252-02-3 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------------|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.133 | Furfuryl isobutyrate | 6270-55-9 | | 10641 | | | | EFSA |
| 13.134 | 1-Furfurylpyrrole | 1438-94-4 | 1310 | 2317 | | | 4 | EFSA |
| 13.135 | 1-(2-Furfurylthio)propanone | 58066-86-7 | | | | | | EFSA |
| 13.136 | 2-Furoic acid | 88-14-2 | | 10098 | | | | EFSA |
| 13.137 | 3-(2-Furyl)-2-phenylprop-2-enal | 65545-81-5 | 1502 | 11928 | | | 1 | EFSA |
| 13.138 | 1-(2-Furyl)butan-3-one | 699-17-2 | 1510 | 11084 | | | 4 | EFSA |
| 13.139 | 5-Hydroxymethylfurfuraldehyde | 67-47-0 | | 11112 | | | | EFSA |
| 13.140 | Linalool oxide (5-ring) | 1365-19-1 | 1454 | 11876 | | | | EFSA |
| 13.141 | Methyl (2-furfurylthio)acetate | 108499-33-8 | | | | | | EFSA |
| 13.142 | S-Methyl 2-furanthiocarboxylate | 13679-61-3 | 1083 | 11547 | | | | EFSA |
| 13.143 | Methyl 3-(furfurylthio)propionate | 94278-26-9 | | | | | | EFSA |
| 13.144 | Methyl 5-methylfurfuryl disulfide | 78818-78-7 | | | | | | EFSA |
| 13.145 | Methyl 5-methylfurfuryl sulfide | 13679-60-2 | | 11522 | | | | EFSA |
| 13.146 | Methyl furfuryl trisulfide | 66169-00-4 | | | | | | EFSA |
| 13.148 | 3-Methyl-2-(3-methylbut-2-enyl)furan | 15186-51-3 | 1494 | | | | 3 | EFSA |
| 13.149 | 5-Methyl-2-furanmethanethiol | 59303-05-8 | | | | | | EFSA |
| 13.150 | 3-(5-Methyl-2-furyl)prop-2-enal | 5555-90-8 | 1499 | | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.151 | 2-Methyl-3,5 and 6-(furfurylthio)pyrazine | 65530-53-2 | 1082 | 2287 | Mixture of isomers: 70% 2,3-; 29% 2,6;-trace 2,5- | | | EFSA |
| 13.152 | 2-Methyl-3-(methylthio)furan | 63012-97-5 | 1061 | | | | | EFSA |
| 13.153 | 2-Methyl-3-furyl thioacetate | 55764-25-5 | 1069 | | At least 92%; secondary component 5-7 % cis- and trans-2-methyl-3-tetrahydrofuranthiol acetate | | | EFSA |
| 13.154 | 2-Methyl-4,5-benzo-oxazole | 95-21-6 | 1557 | | | | | EFSA |
| 13.160 | 2-Methyltetrahydrofuran-3-thiol | 57124-87-5 | 1090 | | | | 4 | EFSA |
| 13.161 | Octahydrocoumarin | 4430-31-3 | 1166 | | | | | EFSA |
| 13.162 | 2-Octylfuran | 4179-38-8 | | 10965 | | | 3 | EFSA |
| 13.163 | 2-Pentanoylfuran | 3194-17-0 | 1509 | | | | 4 | EFSA |
| 13.165 | 6,7,8,8a-Tetrahydro-2,5,5,8a-tetra-methyl-5H-1-benzopyran | 5552-30-7 | 1239 | | | | | EFSA |
| 13.166 | Tetrahydrofurfuryl acetate | 637-64-9 | 1442 | 2069 | | | | EFSA |
| 13.167 | (tetrahydrofuryl)methyl phenylacetate | 5421-00-1 | | | | | | EFSA |
| 13.169 | Trimethyloxazole | 20662-84-4 | 1553 | 11424 | | | | EFSA |
| 13.170 | 2S-cis-Tetrahydro-4-methyl-2-(2-methyl-1-propenyl)-2H-pyran | 3033-23-6 | | | | | 1 | EFSA |
| 13.175 | 4-Acetyl-2,5-dimethylfuran-3(2H)-one | | | | | | 2 | EFSA |
| 13.176 | Furaneyl butyrate | 114099-96-6 | 1519 | | | | 1 | EFSA |
| 13.178 | 3-[(2-Furfuryl)dithio]-2-methyl-furan | 109537-55-5 | 1524 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|--------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 13.185 | 3-[(2-Furfuryl)dithio]-2-butanone | 159113-17-4 | | | | | | EFSA |
| 13.189 | Linalool oxide(5) acetate | 56469-39-7 | | | | | | EFSA |
| 13.190 | 3-((2-Methyl-3-furyl)thio)-2-butanone | 61296-44-1 | 1525 | | | | | EFSA |
| 13.193 | 2,5-Dimethyltetrahydro-3-furanthiol | 26486-21-5 | 1091 | | | | 4 | EFSA |
| 13.194 | 2,5-Dimethyltetrahydro-3-furyl thio acetate | 252736-39-3 | 1092 | | | | 4 | EFSA |
| 13.195 | 2-Isobutyl-4,5-dimethyl oxazole | 26131-91-9 | 1556 | | | | | EFSA |
| 13.196 | [(2-furanylmethyl)thio]-2-pentanone | 180031-78-1 | 1084 | | | | | EFSA |
| 13.197 | Furfuryl propyl disulphide | 252736-36-0 | 1079 | | | | | EFSA |
| 13.198 | 3,6-Dimethyl-2,3,3a,4,5,7a-hexahydro-benzofuran | 70786-44-6 | | | | | | EFSA |
| 13.199 | 3-[(2-Methyl-3-furyl)thio]-butanal | 915971-43-6 | | | | | | EFSA |
| 13.200 | 5-isopropyl-2,6-diethyl-2-methyltetrahydro-2H-pyran | 1120363-98-5 | | | | | | EFSA |
| 14.001 | Isoquinoline | 119-65-3 | 1303 | 487 | | | 4 | EFSA |
| 14.003 | Piperine | 94-62-2 | 1600 | 492 | | | 4 | JECFA/EFSA |
| 14.004 | 3-Methylindole | 83-34-1 | 1304 | 493 | | | | EFSA |
| 14.005 | 2,3-Diethylpyrazine | 15707-24-1 | 771 | 534 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.006 | 2-Ethyl-3-methylpyrazine | 15707-23-0 | 768 | 548 | | | | EFSA |
| 14.007 | Indole | 120-72-9 | 1301 | 560 | | | | EFSA |
| 14.010 | Piperidine | 110-89-4 | 1607 | 675 | | | | EFSA |
| 14.011 | Quinine hydrochloride | 130-89-2 | | 715 | | In categories 14.1 and 14.2 – not more than 100 mg/kg In spirit drinks as defined in Regulation (EC) No 110/2008 - not more than 250 mg/kg Individually or in combination with FL 14.152 and/or FL 14.155 expressed as quinine base | | EFSA |
| 14.014 | 5,7-Dihydro-2-methylthieno(3,4-d)pyrimidine | 36267-71-7 | 1566 | 720 | | | | EFSA |
| 14.015 | 5,6,7,8-Tetrahydroquinoxaline | 34413-35-9 | 952 | 721 | | | | EFSA |
| 14.017 | 2-Ethyl-5-methylpyrazine | 13360-64-0 | 770 | 728 | | | | EFSA |
| 14.018 | 2,3,5,6-Tetramethylpyrazine | 1124-11-4 | 780 | 734 | | | | EFSA |
| 14.019 | 2,3,5-Trimethylpyrazine | 14667-55-1 | 774 | 735 | | | | EFSA |
| 14.020 | 2,5-Dimethylpyrazine | 123-32-0 | 766 | 2210 | | | | EFSA |
| 14.021 | 2,6-Dimethylpyrazine | 108-50-9 | 767 | 2211 | | | | EFSA |
| 14.022 | Ethylpyrazine | 13925-00-3 | 762 | 2213 | | | | EFSA |
| 14.024 | 2-Ethyl-3,5-dimethylpyrazine | 13925-07-0 | 776 | 2245 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|---------------------------------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.025 | 2,5 or 6-Methoxy-3-methylpyrazine | 2847-30-5, 2822-22-6, 2882-21-5 | 788 | 2266 | | | | EFSA |
| 14.026 | 2-Isopropyl-5-methylpyrazine | 13925-05-8 | 772 | 2268 | | | | EFSA |
| 14.027 | 2-Methylpyrazine | 109-08-0 | 761 | 2270 | | | | EFSA |
| 14.028 | 5-Methylquinoxaline | 13708-12-8 | 798 | 2271 | | | | EFSA |
| 14.029 | 1-Phenyl-(3 or 5)-propylpyrazole | 65504-93-0 | 1568 | 2277 | | | | EFSA |
| 14.030 | 2-Pyridine methanethiol | 2044-73-7 | 1308 | 2279 | | | | EFSA |
| 14.031 | 2-Pyrazinyl ethanethiol | 35250-53-4 | 795 | 2285 | | | | EFSA |
| 14.032 | Acetylpyrazine | 22047-25-2 | 784 | 2286 | | | | EFSA |
| 14.034 | Pyrazinyl methyl sulfide | 21948-70-9 | 796 | 2288 | | | | EFSA |
| 14.035 | 2-Methyl-3,5 or 6-methylthiopyrazine | 67952-65-2 | 797 | 2290 | 70-90% 2-methylthio-3-methylpyrazine and 10-30% 2-methylthio-5 or 6-methylpyrazine. | | | EFSA |
| 14.037 | 6,7-Dihydro-5-methyl-5H-cyclopentapyrazine | 23747-48-0 | 781 | 2314 | | | | EFSA |
| 14.038 | 2-Acetylpyridine | 1122-62-9 | 1309 | 2315 | | | | EFSA |
| 14.039 | 3-Acetylpyridine | 350-03-8 | 1316 | 2316 | | | | EFSA |
| 14.041 | Pyrrrole | 109-97-7 | 1314 | 2318 | | | 4 | JECFA/EFSA |
| 14.042 | 6-Methylquinoline | 91-62-3 | 1302 | 2339 | | | 4 | EFSA |
| 14.043 | 2-Isobutyl-3-methoxypyrazine | 24683-00-9 | 792 | 11338 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.044 | 2-Isobutyl-3-methylpyrazine | 13925-06-9 | 773 | | | | | EFSA |
| 14.045 | 2-Acetyl-1-ethylpyrrole | 39741-41-8 | 1305 | 11371 | | | 2 | EFSA |
| 14.046 | 2-Acetyl-1-methylpyrrole | 932-16-1 | 1306 | 11373 | | | 2 | EFSA |
| 14.047 | 2-Acetylpyrrole | 1072-83-9 | 1307 | 11721 | | | 2 | EFSA |
| 14.049 | 2-Acetyl-3-ethylpyrazine | 32974-92-8 | 785 | 11293 | | | | EFSA |
| 14.050 | 2,3-Dimethylpyrazine | 5910-89-4 | 765 | 11323 | | | | EFSA |
| 14.053 | Mercaptomethylpyrazine | 59021-02-2 | 794 | 11502 | | | | EFSA |
| 14.054 | Methoxypyrazine | 3149-28-8 | 787 | 11347 | | | | EFSA |
| 14.055 | 2-Acetyl-3,5-dimethylpyrazine | 54300-08-2 | 786 | 11294 | | | | EFSA |
| 14.056 | 2,3-Diethyl-5-methylpyrazine | 18138-04-0 | 777 | 11303 | | | | EFSA |
| 14.057 | 2-Isopropyl-3-methoxypyrazine | 25773-40-4 | | | | | | EFSA |
| 14.058 | 2-Isobutylpyridine | 6304-24-1 | 1311 | 11395 | | | | EFSA |
| 14.059 | 3-Isobutylpyridine | 14159-61-6 | 1312 | 11396 | | | | EFSA |
| 14.060 | 2-Pentylpyridine | 2294-76-0 | 1313 | 11412 | | | | EFSA |
| 14.061 | 3-Ethylpyridine | 536-78-7 | 1315 | 11386 | | | | EFSA |
| 14.062 | 2-(sec-Butyl)-3-methoxypyrazine | 24168-70-5 | 791 | 11300 | | | | EFSA |
| 14.064 | Pyrrolidine | 123-75-1 | 1609 | 10491 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|--|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.065 | 2,6-Dimethylpyridine | 108-48-5 | 1317 | 11381 | | | | EFSA |
| 14.066 | 5-Ethyl-2-methylpyridine | 104-90-5 | 1318 | 11385 | | | | EFSA |
| 14.067 | 2-Methyl-3-ethoxypyrazine | 32737-14-7 | 793 | 11921 | 82% 2-methyl-3-ethoxypyrazine and 15% 2-methyl-5 or 6-ethoxypyrazine | | | EFSA |
| 14.068 | 2-Propionylpyrrole | 1073-26-3 | 1319 | 11942 | | | 2 | EFSA |
| 14.069 | Cyclohexylmethylpyrazine | 28217-92-7 | 783 | | | | | EFSA |
| 14.070 | 4-Acetyl-2-methylpyrimidine | 67860-38-2 | 1565 | | | | | EFSA |
| 14.071 | Methyl nicotinate | 93-60-7 | 1320 | | | | | EFSA |
| 14.072 | 2-(3-Phenylpropyl)pyridine | 2110-18-1 | 1321 | | | | | EFSA |
| 14.077 | 2-Ethyl-(3,5 or 6)-methoxypyrazine (85%) and 2-Methyl-(3,5 or 6)-methoxypyrazine (13%) | 2-Et-3-MeO: 25680-58-4, 2-Et-5-MeO: 68039-50-9, 2-Et-6-MeO: 67845-38-9, 2-Me-3-MeO: 2847-30-5, 2-Me-5-MeO: 2882-22-6, 2-Me-6-MeO: 2882-21-5 | 789 | 11329 | | | | EFSA |
| 14.079 | 2-Acetyl-1,4,5,6-tetrahydropyridine | 27300-27-2 | | | | | 2 | EFSA |
| 14.080 | 2-Acetyl-1-pyrroline | 99583-29-6 | 1604 | | | | | EFSA |
| 14.081 | 5-Acetyl-2,3-dimethylpyrazine | 54300-10-6 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.082 | 2-Acetyl-3-methylpyrazine | 23787-80-6 | 950 | 11296 | | | | EFSA |
| 14.083 | 2-Acetyl-5-ethylpyrazine | 43108-58-3 | | | | | | EFSA |
| 14.084 | 2-Acetyl-5-methylpyrazine | 22047-27-4 | | 11297 | | | | EFSA |
| 14.085 | 2-Acetyl-5-methylpyrrole | 6982-72-5 | | | | | 2 | EFSA |
| 14.086 | 2-Acetyl-6-ethylpyrazine | 34413-34-8 | | 11295 | | | | EFSA |
| 14.087 | 2-Acetyl-6-methylpyrazine | 22047-26-3 | | 11298 | | | | EFSA |
| 14.088 | 1-Acetylintole | 576-15-8 | | | | | | EFSA |
| 14.089 | 4-Acetylpyridine | 1122-54-9 | | | | | | EFSA |
| 14.091 | 2-Butyl-3-methylpyrazine | 15987-00-5 | | | | | | EFSA |
| 14.092 | 2-Butylpyridine | 5058-19-5 | | | | | | EFSA |
| 14.093 | 3-Butylpyridine | 539-32-2 | | | | | | EFSA |
| 14.095 | 3,5-Diethyl-2-methylpyrazine | 18138-05-1 | 779 | 11305 | | | | EFSA |
| 14.096 | 2,5-Diethyl-3-methylpyrazine | 32736-91-7 | 778 | 11304 | | | | EFSA |
| 14.097 | 2,5-Diethylpyrazine | 13238-84-1 | | 11306 | | | | EFSA |
| 14.098 | 6,7-Dihydro-2,3-dimethyl-5H-cyclopentapyrazine | 38917-63-4 | 782 | 11309 | | | | EFSA |
| 14.099 | 6,7-Dihydro-5,7-dimethyl-5H-cyclopentapyrazine | 41330-21-6 | | | | | | EFSA |
| 14.100 | 3,(5- or 6)-Dimethyl-2-ethylpyrazine | 55031-15-7 | 775 | 727 | About 50% 2-ethyl-3,5-dimethylpyrazine; about 50% 2-ethyl-3,6-dimethylpyrazine | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|---------------------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.101 | 2,5-Dimethyl-3-isopropylpyrazine | 40790-20-3 | | 11318 | | | | EFSA |
| 14.102 | 2,5-Dimethyl-6,7-dihydro-5H-cyclopentapyrazine | 38917-61-2, 38917-62-3 | | | Mixture of 2,5-dimethyl-6,7-dihydro-5H-cyclopentapyrazine (60-100%) and 3,5-dimethyl-6,7-dihydro-5H-cyclopentapyrazine (up to 40 %). | | | EFSA |
| 14.103 | 2,3-Dimethylpyridine | 583-61-9 | | | | | | EFSA |
| 14.104 | 2,4-Dimethylpyridine | 108-47-4 | | | | | | EFSA |
| 14.105 | 3,4-Dimethylpyridine | 583-58-4 | | | | | | EFSA |
| 14.106 | 3,5-Dimethylpyridine | 591-22-0 | | 11382 | | | | EFSA |
| 14.108 | 2,3-Dimethylquinoxaline | 2379-55-7 | | | | | | EFSA |
| 14.109 | 2-Ethoxy-3-methylpyrazine | 32737-14-7 | | | | | | EFSA |
| 14.110 | Ethyl nicotinate | 614-18-6 | | | | | | EFSA |
| 14.111 | 3-Ethyl-2,5-dimethylpyrazine | 13360-65-1 | | | | | | EFSA |
| 14.112 | 2-Ethyl-3-methoxypyrazine | 25680-58-4 | | | | | | EFSA |
| 14.113 | 5-Ethyl-6,7-dihydro-5H-cyclopentapyrazine | 52517-53-0 | | | | | | EFSA |
| 14.114 | 2-Ethyl-6-methylpyrazine | 13925-03-6 | 769 | 11331 | 95% (sum of 2,5- and 2,6-isomers); 60-63% 2,5-isomer and 30-35% 2,6-isomer | | | EFSA |
| 14.115 | 2-Ethylpyridine | 100-71-0 | | 11767 | | | | EFSA |
| 14.116 | 4-Ethylpyridine | 536-75-4 | | 11387 | | | | EFSA |
| 14.117 | 2-Hexylpyridine | 1129-69-7 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.118 | 2-Hydroxypyridine | 142-08-5 | | | | | | EFSA |
| 14.120 | Isopropyl nicotinate | 553-60-6 | | | | | | EFSA |
| 14.121 | 2-Isopropyl-(3,5 or 6)-methoxypyrazine | 93905-03-4 | 790 | 11344 | | | | EFSA |
| 14.122 | 2-Isopropyl-3-methylthiopyrazine | 67952-59-4 | | 11342 | | | | EFSA |
| 14.123 | Isopropylpyrazine | 29460-90-0 | 764 | 11343 | | | | EFSA |
| 14.124 | 2-Isopropylpyridine | 644-98-4 | | 11400 | | | | EFSA |
| 14.125 | 4-Isopropylpyridine | 696-30-0 | | | | | | EFSA |
| 14.126 | 2-Methoxy-3-methylpyrazine | 2847-30-5 | | | | | | EFSA |
| 14.127 | 2-Methoxy-3-propylpyrazine | 25680-57-3 | | | | | | EFSA |
| 14.128 | 2-Methyl-3-methylthiopyrazine | 2882-20-4 | | | | | | EFSA |
| 14.129 | 2-Methyl-3-propylpyrazine | 15986-80-8 | | | | | | EFSA |
| 14.131 | 2-Methylindole | 95-20-5 | | | | | | EFSA |
| 14.133 | 2-Methylpiperidine | 109-05-7 | 1608 | | | | | EFSA |
| 14.134 | 2-Methylpyridine | 109-06-8 | | 11415 | | | | EFSA |
| 14.135 | 3-Methylpyridine | 108-99-6 | | 11801 | | | | EFSA |
| 14.136 | 4-Methylpyridine | 108-89-4 | | 11416 | | | | EFSA |
| 14.137 | 1-Methylpyrrolidine | 120-94-5 | | | | | | EFSA |
| 14.140 | 3-Pentylpyridine | 1802-20-6 | | | | | | EFSA |
| 14.141 | Piperazine | 110-85-0 | 1615 | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|---|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.142 | Propylpyrazine | 18138-03-9 | 763 | 11362 | | | | EFSA |
| 14.143 | 3-Propylpyridine | 4673-31-8 | | 11419 | | | | EFSA |
| 14.144 | Pyrazine | 290-37-9 | 951 | 11363 | | | | EFSA |
| 14.145 | Pyrrole-2-carbaldehyde | 1003-29-8 | | 11393 | | | 4 | EFSA |
| 14.148 | 5,6,7,8-Tetrahydro-5-methylquinoxaline | 52517-54-1 | | | | | | EFSA |
| 14.150 | 2,4,6-Trimethylpyridine | 108-75-8 | | | | | | EFSA |
| 14.152 | Quinine sulphate | 804-63-7 | | | | In categories 14.1 and 14.2 – not more than 100 mg/kg In spirit drinks as defined in Regulation (EC) No 110/2008 - not more than 250 mg/kg Individually or in combination with FL 14.011 and/or FL 14.155 expressed as quinine base | | EFSA |
| 14.155 | Quinine monohydrochloride dihydrate | 6119-47-7 | | | | In categories 14.1 and 14.2 – not more than 100 mg/kg In spirit drinks as defined in Regulation (EC) No 110/2008 - not more than 250 mg/kg Individually or in combination with FL 14.011 and/or FL 14.152 expressed as quinine base | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-------------|-----------|---------|---|---------------------|----------|--------------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 14.161 | 6,7-Dihydro-2,5-dimethyl-5H-cyclopentapyrazine | 38917-61-2 | | 11310 | | | | EFSA |
| 14.163 | 1-Methylpyrrole-2-carboxaldehyde | 1192-58-1 | | | | | 4 | EFSA |
| 14.164 | 2-Propylpyridine | 622-39-9 | 1322 | | | | | EFSA |
| 14.167 | 1-Pyrroline | 5724-81-2 | 1603 | | | | | EFSA |
| 14.168 | 2-Propionyl pyrroline 1% vegetable oil triglycerides | 133447-37-7 | 1605 | | | | 2 | EFSA |
| 14.169 | 1-Ethyl-2-pyrrolicarboxaldehyde | 2167-14-8 | | | | | 4 | EFSA |
| 14.170 | 5-Ethyl-2,3-dimethyl pyrazine | 15707-34-3 | | | | | | EFSA |
| 15.001 | 2-Mercaptothiophene | 7774-74-5 | 1052 | 478 | | | | EFSA |
| 15.002 | 2-Methyl-5-methoxythiazole | 38205-64-0 | 1057 | 736 | | | | EFSA |
| 15.004 | 5-Methyl-2-thiophenecarbaldehyde | 13679-70-4 | 1050 | 2203 | | | 2 | EFSA |
| 15.005 | 2,4-Dimethyl-5-vinylthiazole | 65505-18-2 | 1039 | 2237 | | | 2 | EFSA |
| 15.006 | 2,5-Dihydroxy-2,5-dimethyl-1,4-dithiane | 55704-78-4 | 562 | 2322 | | | | JECFA |
| 15.007 | Spiro(2,4-dithia-1-methyl-8-oxabicyclo[3.3.0]octane-3,3'-(1'-oxa-2'-methyl)-cyclopentane) and Spiro(2,4-dithia-6-methyl-7-oxabicyclo[3.3.0]octane-3,3'-(1'-oxa-2'-methyl)-cyclopentane) | 38325-25-6 | 1296 | 2325 | | | 1 | CoE/ JECFA/EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 15.008 | 2-Thienyl disulfide | 6911-51-9 | 1053 | 2333 | | | | EFSA |
| 15.009 | Trithioacetone | 828-26-2 | 543 | 2334 | | | | JECFA |
| 15.010 | 2-Acetyl-2-thiazoline | 29926-41-8 | 1759 | 2335 | | | 2 | EFSA |
| 15.011 | 5-Acetyl-2,4-dimethylthiazole | 38205-60-6 | 1055 | 2336 | | | | EFSA |
| 15.012 | 4,5-Dihydrothiophen-3(2H)-one | 1003-04-9 | 498 | 2337 | | | | JECFA |
| 15.013 | 2-Isobutylthiazole | 18640-74-9 | 1034 | 11618 | | | | EFSA |
| 15.014 | 5-(2-Hydroxyethyl)-4-methylthiazole | 137-00-8 | 1031 | 11621 | | | | EFSA |
| 15.015 | 4-Methyl-5-(2-acetoxyethyl)thiazole | 656-53-1 | 1054 | 11620 | | | | EFSA |
| 15.016 | Benzothiazole | 95-16-9 | 1040 | 11594 | | | | EFSA |
| 15.017 | 4,5-Dimethylthiazole | 3581-91-7 | 1035 | 11606 | | | | EFSA |
| 15.018 | 4-Methyl-5-vinylthiazole | 1759-28-0 | 1038 | 11633 | | | 2 | EFSA |
| 15.019 | 2,4,5-Trimethylthiazole | 13623-11-5 | 1036 | 11650 | | | | EFSA |
| 15.020 | 2-Acetylthiazole | 24295-03-2 | 1041 | 11726 | | | | EFSA |
| 15.021 | 2-Ethoxythiazole | 15679-19-3 | 1056 | 11611 | | | | EFSA |
| 15.022 | 2-(sec-Butyl)thiazole | 18277-27-5 | 1033 | 11598 | | | | EFSA |
| 15.023 | 4,5-Dihydro-2-methylthiophene-3(2H)-one | 13679-85-1 | 499 | 11601 | | | | JECFA |
| 15.024 | 3-Acetyl-2,5-dimethylthiophene | 2530-10-1 | 1051 | 11603 | | | 2 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 15.025 | 3,5-Dimethyl-1,2,4-trithiolane | 23654-92-4 | 573 | 11883 | | | | JECFA |
| 15.026 | 2-Isopropyl-4-methylthiazole | 15679-13-7 | 1037 | | | | | EFSA |
| 15.027 | 2-Propionylthiazole | 43039-98-1 | 1042 | | | | | EFSA |
| 15.029 | 2-(sec-Butyl)-4,5-dimethyl-3-thiazoline | 65894-82-8 | 1059 | | | | 2 | EFSA |
| 15.030 | 4,5-Dimethyl-2-ethyl-3-thiazoline | 76788-46-0 | 1058 | | | | 2 | EFSA |
| 15.032 | 4,5-Dimethyl-2-isobutyl-3-thiazoline | 65894-83-9 | 1045 | | | | 2 | EFSA |
| 15.033 | 2-Ethyl 4-methylthiazole | 15679-12-6 | 1044 | 11612 | | | | EFSA |
| 15.034 | 2-Methyl-1,3-dithiolane | 5616-51-3 | 534 | | | | | JECFA |
| 15.035 | 4-Methylthiazole | 693-95-8 | 1043 | 11627 | | | | EFSA |
| 15.036 | 3-Methyl-1,2,4-trithiane | 43040-01-3 | 574 | | | | | JECFA |
| 15.038 | 2-Acetyl-4-methylthiazole | 7533-07-5 | | 11589 | | | | EFSA |
| 15.039 | 2-Acetyl-5-methylthiazole | 59303-17-2 | | | | | | EFSA |
| 15.040 | 2-Acetylthiophene | 88-15-3 | | 11728 | | | 2 | EFSA |
| 15.044 | 2-Butylthiazole | 37645-61-7 | | 11597 | | | | EFSA |
| 15.045 | 2-Butylthiophene | 1455-20-5 | | | | | 4 | EFSA |
| 15.047 | 3,5-Di-isobutyl-1,2,4-trithiolane | 92900-67-9 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 15.048 | 3,5-Di-isopropyl-1,2,4-trithiolane | 54934-99-5 | | | | | | EFSA |
| 15.049 | 3,5-Diethyl-1,2,4-trithiolane | 54644-28-9 | 1686 | | | | | EFSA |
| 15.050 | 2,5-Diethyl-4-methylthiazole | 41981-71-9 | | | | | | EFSA |
| 15.051 | 2,5-Diethyl-4-propylthiazole | 4276-68-0 | | | | | | EFSA |
| 15.052 | 2,5-Diethylthiazole | 15729-76-7 | | | | | | EFSA |
| 15.054 | Dihydro-2,4,6-triethyl-1,3,5(4H)-dithiazine | 54717-17-8 | | | | | 3 | EFSA |
| 15.055 | 2,4-Dimethyl(4H)pyrrolidino[1,2e]-1,3,5-dithiazine | 116505-60-3 | 1763 | | | | 3 | EFSA |
| 15.056 | 3,6-Dimethyl-1,2,4,5-tetrathiane | 67411-27-2 | | | | | | EFSA |
| 15.057 | 4,6-Dimethyl-2-(1-methylethyl)dihydro-1,3,5-dithiazine | 104691-40-9 | | | At least 44% isopropyl-4,6-dimethyl and 27% 4-isopropyl-2,6-dimethyl; secondary components at least 24% 2,4,6-trimethyldihydro-1,3,5-dithiazine; 6-methyl-2,4-diisopropyl-1,3,5-dithiazine; 4-methyl-2,6-diisopropyl-1,3,5-dithiazine; 2,4,6-triisopropyl-dihydro-1,3,5-dithiazine | | 3 | EFSA |
| 15.058 | 4,5-Dimethyl-2-ethylthiazole | 873-64-3 | | | | | | EFSA |
| 15.060 | 2,4-Dimethyl-3-thiazoline | 60755-05-7 | | | | | 2 | EFSA |
| 15.061 | 2,5-Dimethyl-4-ethylthiazole | 32272-57-4 | | | | | | EFSA |
| 15.062 | 2,4-Dimethylthiazole | 541-58-2 | | 11605 | | | | EFSA |
| 15.063 | 2,5-Dimethylthiazole | 4175-66-0 | 1758 | | | | | EFSA |
| 15.064 | 2,5-Dimethylthiophene | 638-02-8 | | | | | 4 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|-------------|-----------|---------|---|---------------------|----------|------------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 15.066 | 1,4-Dithiane | 505-29-3 | 456 | | | | | JECFA |
| 15.067 | 4-Ethyl-2-methylthiazole | 32272-48-3 | | | | | | EFSA |
| 15.068 | 5-Ethyl-2-methylthiazole | 19961-52-5 | | | | | | EFSA |
| 15.069 | 4-Ethyl-5-methylthiazole | 52414-91-2 | | | | | | EFSA |
| 15.071 | 2-Ethylthiazole | 15679-09-1 | | | | | | EFSA |
| 15.072 | 2-Ethylthiophene | 872-55-9 | | 11614 | | | 4 | EFSA |
| 15.074 | 5-Ethylthiophene-2-carbaldehyde | 36880-33-8 | | | | | 2 | EFSA |
| 15.076 | 2-Hexylthiophene | 18794-77-9 | 1764 | 11616 | | | 4 | JECFA/EFSA |
| 15.078 | 2-Isobutyl-4,5-dimethylthiazole | 53498-32-1 | | 11617 | | | | EFSA |
| 15.079 | 2-Isobutyldihydro-4,6-dimethyl-1,3,5-dithiazine | 101517-87-7 | | | At least 64% 2-isobutyl-4,6-dimethyl and 18% 4-isobutyl-2,6-dimethyl; secondary components at least 13% 2,4,6-trimethyl-1,3,5-dithiazine; 2,4-diisobutyl-6-methyl-1,3,5-dithiazine; 2,6-dimethyl-4-butyldihydro-1,3,5-dithiazine; substituted 1,3,5-thiadiazine | | 3 | EFSA |
| 15.080 | 2-Isopropyl-4,5-dimethylthiazole | 53498-30-9 | | | | | | EFSA |
| 15.081 | Lenthionine | 292-46-6 | | 11619 | | | | EFSA |
| 15.082 | 3-Mercaptothiophene | 7774-73-4 | | | | | | EFSA |
| 15.083 | 3-Methyl-1,2,4-trithiolane | 51647-38-2 | | | | | | EFSA |
| 15.084 | 5-Methyl-2-pentylthiazole | 86290-21-3 | | | | | | EFSA |
| 15.085 | 4-Methyl-2-propionylthiazole | 13679-83-9 | | 11622 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 15.086 | 2-Methyl-2-thiazoline | 2346-00-1 | | | | | 2 | EFSA |
| 15.087 | 2-Methyl-3-mercaptothiophene | 2527-76-6 | | | | | | EFSA |
| 15.089 | 2-Methylthiazole | 3581-87-1 | | 11626 | | | | EFSA |
| 15.091 | 2-Methylthiophene | 554-14-3 | | 11631 | | | 4 | EFSA |
| 15.092 | 3-Methylthiophene | 616-44-4 | | 11632 | | | 4 | EFSA |
| 15.093 | 2-Octylthiophene | 880-36-4 | | | | | 4 | EFSA |
| 15.096 | 2-Pentylthiophene | 4861-58-9 | | 11634 | | | 4 | EFSA |
| 15.097 | 2-Propionylthiophene | 13679-75-9 | | 11635 | | | 2 | EFSA |
| 15.098 | 2-Propylthiazole | 17626-75-4 | | | | | | EFSA |
| 15.103 | 1,2,4,5-Tetrathiane | 291-22-5 | | | | | | EFSA |
| 15.108 | 2-Thiophenemethanethiol | 6258-63-5 | | | | | | EFSA |
| 15.109 | 2,4,6-Trimethyldihydro-1,3,5(4H)-dithiazine | 638-17-5 | 1049 | 11649 | | | 3 | EFSA |
| 15.110 | 2,4,6-Trimethyl-1,3,5-trithiane | 2765-04-0 | | | | | | EFSA |
| 15.111 | 1,2,4-Trithiolane | 289-16-7 | | | | | | EFSA |
| 15.113 | 5,6-Dihydro-2,4,6-tris(2-methylpropyl)4H-1,3,5-dithiazine | 74595-94-1 | 1048 | | | | 3 | EFSA |
| 15.115 | 2-Isobutyl-4-methyl thiazole | 61323-24-8 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|--|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 15.116 | 2-Acetyl-4-ethylthiazole | 233665-91-3 | | | | | | EFSA |
| 15.118 | 4-Butylthiazole | 53833-33-3 | | | | | | EFSA |
| 15.119 | 2-Isobutyl-3-thiazoline | 39800-92-5 | | | | | 2 | EFSA |
| 15.126 | 3-(Methylthio)-methylthiophen | 61675-72-7 | 1765 | | | | | EFSA |
| 15.128 | 2-Propionyl-2-thiazoline | 29926-42-9 | 1760 | | | | 2 | EFSA |
| 15.130 | 5-Ethyl-4-methyl-2-(2-methylpropyl)-thiazoline | 83418-53-5 | 1761 | | | | 2 | EFSA |
| 15.131 | 5-Ethyl-4-methyl-2-(2-butyl)-thiazoline | 83418-54-6 | 1762 | | | | 2 | EFSA |
| 15.134 | 2,5-Dihydroxy-1,4-Dithiane | 40018-26-6 | 550 | | | | 1 | EFSA |
| 15.135 | Ethyl thialdine | 54717-14-5 | | | At least 90%, secondary components less than 5% 3,5-diethyl-1,2,4-trithiolane, less than 2% thialdine, less than 3% other impurities | | 3 | EFSA |
| 16.001 | Ammonium isovalerate | 7563-33-9 | 1203 | 464 | | | | EFSA |
| 16.002 | Diammonium sulphide | 12135-76-1 | | 482 | | | | EFSA |
| 16.006 | N-Nonanoyl 4-hydroxy-3-methoxy-benzylamide | 2444-46-4 | 1599 | 590 | | | | EFSA |
| 16.007 | Hydrogen sulfide | 7783-06-4 | 1658 | 647 | | | | EFSA |
| 16.009 | Ammonia | 7664-41-7 | | 739 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|------------|-----------|---------|---|---|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 16.012 | Glycyrrhizic acid | 1405-86-3 | | 2221 | | In categories 1 and 3 – not more than 375 mg/kg In category 5 – not more than 1 500 mg/kg In category 5.3 – not more than 5 000 mg/kg In category 7 – not more than 200 mg/kg In category 8 – not more than 25 mg/kg In category 9 – not more than 20 mg/kg In category 14.1 – not more than 50 mg/kg In category 14.2 – not more than 550 mg/kg | | EFSA |
| 16.013 | N-Ethyl-2-isopropyl-5-methylcyclohexane carboxamide | 39711-79-0 | 1601 | 2298 | | | | EFSA |
| 16.015 | Ethyl methylphenylglycidate | 77-83-8 | 1577 | 6002 | | | | EFSA |
| 16.016 | Caffeine | 58-08-2 | | 11741 | | Restrictions for use as a flavouring substance: In category 1 – not more than 70 mg/kg In category 3 – not more than 70 mg/kg In category 5 – not more than 100 mg/kg In category 14.1 – not more than 150 mg/kg | 1 | EFSA |
| 16.018 | Ethyl 3-phenyl-2,3-epoxypropionate | 121-39-1 | 1576 | 11844 | | | | EFSA |
| 16.027 | Thiamine hydrochloride | 67-03-8 | 1030 | 10493 | | | | EFSA |
| 16.030 | 2-Methyl-4-propyl-1,3-oxathiane | 67715-80-4 | 464 | 11540 | | | | JECFA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|------------|-----------|---------|---|--|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 16.032 | Theobromine | 83-67-0 | | | | Restrictions for use as a flavouring substance: In category 1 – not more than 70 mg/kg In category 14.1 – not more than 100 mg/kg | 1 | EFSA |
| 16.039 | Potassium 2-(1'-ethoxy)ethoxypropionate | | 933 | | | | | EFSA |
| 16.040 | Ethyl 2,3-epoxy-3-methyl-3-p-tolylpropionate | 74367-97-8 | 1578 | 11707 | | | | EFSA |
| 16.041 | Sodium 2-(4-methoxyphenoxy)propionate | 13794-15-5 | 1029 | | | | | EFSA |
| 16.043 | beta-Caryophyllene epoxide | 1139-30-6 | 1575 | 10500 | | | 2 | EFSA |
| 16.048 | Ammonium chloride | 12125-02-9 | | | | In categories 1, 8, 9, and 15 – not more than 3 g/kg In category 5 – <i>quantum satis</i> In category 12 – not more than 3g/kg except for salt substitutes 40g/kg In category 14.2 – not more than 25 g/l | | EFSA |
| 16.052 | 1,6-Hexalactam | 105-60-2 | 1594 | | | | | EFSA |
| 16.053 | 2-Isopropyl- N,2,3-trimethylbutanamide | 51115-67-4 | 1595 | 10459 | | | | EFSA |
| 16.055 | (R)-(+)-Sclareolide | 564-20-5 | 1165 | | | | | EFSA |
| 16.056 | Taurine | 107-35-7 | 1435 | | | | | EFSA |
| 16.058 | Naringin | 10236-47-2 | | 10286 | | | | EFSA |
| 16.059 | Ammonium hydrogen sulphide | 12124-99-1 | | 482 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---------------------------------------|------------|-----------|---------|---|---|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 16.060 | Glycyrrhizic acid, ammoniated | 53956-04-0 | | 2221 | | <p>In category 1 – not more than 40 mg/kg</p> <p>In category 3 – not more than 90 mg/kg</p> <p>In category 5 – not more than 1 500 mg/kg</p> <p>In category 5.3 - not more than 5 000 mg/kg</p> <p>In category 6 – not more than 45 mg/kg</p> <p>In categories 7 and 13 – not more than 60 mg/kg</p> <p>In category 9 – not more than 300 mg/kg</p> <p>In category 11 – not more than 100 mg/kg</p> <p>In category 12 – not more than 50 mg/kg</p> <p>In categories 14.1 and 14.2 – not more than 200 mg/kg</p> <p>In category 15 – not more than 150 mg/kg</p> | | EFSA |
| 16.061 | Neohesperidin dihydrochalcone | 20702-77-6 | | | | <p>Restrictions for use as a flavouring substance:</p> <p>In categories 1, 3, 4.2, 6, 8, 9, 10, 12 and 14 - not more than 3 mg/kg</p> <p>In categories 2, 5 and 7 - not more than 4 mg/kg</p> <p>In category 15 – not more than 5 mg/kg</p> | | EFSA |
| 16.062 | trans-2-Methyl-4-propyl-1,3-oxathiane | 59324-17-3 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 16.071 | 4,5-Epoxydec-2(trans)-enal | 188590-62-7 | 1570 | | At least 87%; secondary component 8-9% 4,5-epoxydec-2(cis)-enal | | 1 | EFSA |
| 16.073 | Sodium diacetate | 126-96-5 | | | | | | EFSA |
| 16.075 | Ethyl vanillin beta-D-glucopyranoside | 122397-96-0 | 892 | | | | | EFSA |
| 16.080 | Tannic acid | 72401-53-7 | | 746 | | | | SCF/CoE |
| 16.081 | Sucrose octaacetate | 126-14-7 | | 11819 | | | | EFSA |
| 16.083 | 5,7-dihydroxy-2-(4-hydroxy-3-methoxyphenyl)-2,3-dihydro-4H-chromen-4-one sodium salt | 462631-45-4 | | | | | | EFSA |
| 16.087 | Dianthramid B | 579-93-1 | 1552 | | | | | EFSA |
| 16.088 | l-Menthylmethylether | 1565-76-0 | 1415 | | | | | EFSA |
| 16.089 | Ferric ammonium citrate | 1185-57-5 | | | | | | EFSA |
| 16.090 | 3-(3,4-Dimethoxyphenyl)-N-[2-(3,4-dimethoxyphenyl)-ethyl]-acrylamide | 69444-90-2 | 1777 | | | | 3 | EFSA |
| 16.091 | Deca-(2E,4E)-dienoic acid isobutylamide | 18836-52-7 | 1598 | | | | 4 | EFSA |
| 16.092 | (1R,2S,5R)-N,N-Dimethyl menthyl succinamide | 544714-08-1 | 1602 | | | | | EFSA |
| 16.094 | N-Ethyl (2E,6Z)-nonadienamide | 608514-56-3 | 1596 | | | | 4 | EFSA |
| 16.095 | Cyclopropanecarboxamide, N-[(2E)-3,7-dimethyl-2,6-octadien-1-yl]- | 744251-93-2 | 1779 | | | | 1 | EFSA |
| 16.096 | Ferrous lactate | 5905-52-2 | | | | | | EFSA |
| 16.097 | Hesperetin | 520-33-2 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--|-------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 16.098 | N-(1-Propylbutyl)-1,3-benzodioxole-5-carboxamide | 745047-51-2 | 1767 | | | | | EFSA |
| 16.099 | N-(2,4-Dimethoxy-benzyl)-N'-(2-pyridin-2-yl-ethyl)-oxalamide | 745047-53-4 | 1768 | | | | | EFSA |
| 16.100 | N1-(2-Methoxy-4-methylbenzyl)-N2-(2-(5-methylpyridin-2-yl)ethyl)oxalamide | 745047-94-3 | 1769 | | | | | EFSA |
| 16.101 | N1-(2-Methoxy-4-methylbenzyl)-N2-(2-(pyridin-2-yl)ethyl)oxalamide | 745047-97-6 | 1770 | | | | | EFSA |
| 16.102 | 2,3,4,5,6-Pentahydroxy-N-(2-hydroxyethyl)-hexanamide | 686298-93-1 | 1772 | | | | | EFSA |
| 16.103 | Propanamide, 2-hydroxy-N-(2-hydroxyethyl)-. | 5422-34-4 | 1774 | | | | | EFSA |
| 16.104 | 2-[(2-Hydroxypropanoyl)amino]ethyl dihydrogen phosphate | 782498-03-7 | 1775 | | | | | EFSA |
| 16.105 | (2R,3S,4S,5R)-2-[(2,3,4,5,6-Pentahydroxyhexanoyl)amino]ethyl dihydrogen phosphate | 791807-20-0 | 1773 | | | | | EFSA |
| 16.107 | 2-Hydroxy-N-[2-(4-hydroxyphenyl)ethyl]-propionamide | 781674-18-8 | | | | | | EFSA |
| 16.109 | 3-(4-Hydroxyphenyl)-1-(2,4,6-trihydroxyphenyl)propan-1-one | 60-82-2 | | | | | | EFSA |
| 16.110 | Naringin dihydrochalcone | 18916-17-1 | | | | | | EFSA |
| 16.111 | Glycine, N-[[[(1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl]carbonyl]-, ethyl ester. | 68489-14-5 | 1776 | | | | 1 | EFSA |
| 16.112 | Trilobatin | 4192-90-9 | | | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|--------------|-----------|---------|--|--|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 16.113 | Rebaudioside A | 58543-16-1 | | | | Restrictions for use as a flavouring substance: In categories 1, 3, 4.2, 5, 6, 12, 14.1 and 14.2 – not more than 10 mg/kg | | EFSA |
| 16.114 | 2-Pentyl-4-propyl-1,3-oxathiane | 59323-81-8 | | | | | | EFSA |
| 16.115 | Cyclopropanecarboxylic acid (2-isopropyl-5-methyl-cyclohexyl)-amide | 958660-02-1 | 2006 | | | | 4 | EFSA |
| 16.116 | 4-Amino-5,6-dimethylthieno[2,3-d]pyrimidin-2(1H)-one | 121746-18-7 | | | | | | EFSA |
| 16.117 | N-p-Benzeneacetonitrile-menthanecarboxamide | 852379-28-3 | 2009 | | | | 1 | EFSA |
| 16.118 | N-(2-(Pyridine-2-yl)ethyl)-3-p-menthane-carboxamide | 847565-09-7 | 2008 | | | | 3 | EFSA |
| 16.119 | N-(2-Methylcyclohexyl)-2,3,4,5,6-penta-fluorobenzamide | 1003050-32-5 | | | | | 4 | EFSA |
| 16.120 | 4-Amino-5,6-dimethylthieno[2,3-d]pyrimidin-2(1H)-one hydrochloride | 1033366-59-4 | | | | | | EFSA |
| 16.121 | Spilanthol | 25394-57-4 | | | Mixture of isomers of (2E,6Z,8E)-N-(2-methylpropyl)-2,6,8-decatrienamide: 74% (2E,6Z,8E)-, 17% (2E,6E,8E)-, 6% (2E,6E,8Z)-, 1% (2Z,6Z,8E)-, 0.5% (2E,6E,8E)-, 1% (2Z,6Z,8Z)-isomer, 1.5% other isomers. | | 3 | EFSA |
| 16.122 | 4-Methyl, 2-propyl, 1-3-oxathiane | 1064678-08-5 | | | | | | EFSA |
| 16.123 | (1R,2S,5R)-N-(4-Methoxyphenyl)-5-methyl-2-(1-methylethyl)cyclohexanecarboxamide | 68489-09-8 | | | | | 1 | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|---|--------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 16.124 | (1R,2S,5R)-N-cyclopropyl-5-methyl-2-isopropyl cyclohexanecarboxamide | 73435-61-7 | | | | | 1 | EFSA |
| 16.125 | (2S,5R)-N-[4-(2-amino-2-oxoethyl)phenyl]-5-methyl-2-(propan-2-yl)cyclohexanecarboxamide | 1119711-29-3 | | | | | 1 | EFSA |
| 16.126 | 3-[(4-amino-2,2-dioxido-1H-2,1,3-benzothiadiazin-5-yl)oxy]-2,2-dimethyl-N-propylpropanamide | 1093200-92-0 | | | | | 1 | EFSA |
| 17.001 | beta-Alanine | 107-95-9 | 1418 | | | | | EFSA |
| 17.002 | L-Alanine | 56-41-7 | | 11729 | | | | EFSA |
| 17.003 | L-Arginine | 74-79-3 | 1438 | 11890 | | | | EFSA |
| 17.005 | Aspartic acid | 56-84-8 | 1429 | 10078 | | | | EFSA |
| 17.006 | L-Cystine | 56-89-3 | | 11747 | | | | EFSA |
| 17.007 | Glutamine | 56-85-9 | 1430 | | | | | EFSA |
| 17.008 | L-Histidine | 71-00-1 | 1431 | | | | | EFSA |
| 17.010 | D,L-Isoleucine | 443-79-8 | 1422 | 10127 | | | | EFSA |
| 17.012 | L-Leucine | 61-90-5 | 1423 | 10482 | | | | EFSA |
| 17.013 | D,L-Lysine | 70-54-2 | | 11947 | | | | EFSA |
| 17.014 | D,L-Methionine | 59-51-8 | 1424 | 569 | | | | EFSA |
| 17.015 | S-Methylmethioninesulphonium chloride | 1115-84-0 | 1427 | 761 | | | | EFSA |
| 17.017 | D,L-Phenylalanine | 150-30-1 | 1432 | 10488 | | | | EFSA |

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|--------------------------------|------------|-----------|---------|---|---------------------|----------|-----------|
| FL No. | Chemical Name | CAS No. | JECFA No. | CoE No. | Purity of the named substance at least 95% unless otherwise specified | Restrictions of Use | Footnote | Reference |
| 17.018 | L-Phenylalanine | 63-91-2 | 1428 | 10488 | | | | EFSA |
| 17.019 | L-Proline | 147-85-3 | 1425 | 10490 | | | | EFSA |
| 17.020 | D,L-Serine | 302-84-1 | | | | | | EFSA |
| 17.021 | D,L-Threonine | 80-68-2 | | | | | | EFSA |
| 17.022 | L-Thyrosine | 60-18-4 | 1434 | | | | | EFSA |
| 17.023 | D,L-Valine | 516-06-3 | 1426 | | | | | EFSA |
| 17.024 | D,L-Alanine | 302-72-7 | 1437 | 11729 | | | | EFSA |
| 17.026 | L-Lysine | 56-87-1 | 1439 | 11947 | | | | EFSA |
| 17.027 | L-Methionine | 63-68-3 | | | | | | EFSA |
| 17.028 | L-Valine | 72-18-4 | | | | | | EFSA |
| 17.031 | L-(+)-Lysine monohydrochloride | 657-27-2 | | 11947 | | | | EFSA |
| 17.032 | L-Cysteine hydrochloride | 52-89-1 | | 11746 | | | | EFSA |
| 17.033 | L-Cysteine | 52-90-4 | 1419 | 10464 | | | | EFSA |
| 17.034 | Glycine | 56-40-6 | 1421 | 11771 | | | | EFSA |
| 17.035 | 4-Amino-butyrlic acid | 56-12-2 | 1771 | | | | | EFSA |
| 17.036 | S-allyl-L-cysteine | 21593-77-1 | 1710 | | | | | EFSA |
| 17.037 | L-Methionylglycine | 14486-03-4 | | | | | 1 | EFSA |

PART B

Flavouring preparations

PART C

Thermal process flavourings

PART D

Flavour precursors

PART E

Other flavourings

PART F

Source materials

COMMISSION REGULATION (EU) No 873/2012

of 1 October 2012

on transitional measures concerning the Union list of flavourings and source materials set out in Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC⁽¹⁾, and in particular Article 25(3) thereof,

Whereas:

- (1) Article 9 of Regulation (EC) No 1334/2008 lays down the type of flavourings and source materials for which an evaluation and approval is required.
- (2) Article 10 of Regulation (EC) No 1334/2008 provides that, of the flavourings and source materials referred to in Article 9, only those included in the Union list may be placed on the market as such and used in or on foods under the conditions of use specified therein, where applicable.
- (3) Article 30 of Regulation (EC) No 1334/2008 specifies that Article 10 is to apply from 18 months after the date of application of the Union list.
- (4) It is therefore appropriate to fix that date of application of the Union list for the purposes of third paragraph of Article 30 of Regulation (EC) No 1334/2008.
- (5) As a first step, a Union list of flavouring substances referred to in point (a) of Article 9 of Regulation (EC) No 1334/2008 has been established by Commission Regulation (EU) No 872/2012⁽²⁾ by introducing the list of flavouring substances referred to in Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽³⁾ into Annex I to Regulation (EC) No 1334/2008 and by fixing the dates of application of that list.
- (6) Pursuant to Regulation (EC) No 1334/2008 flavouring substances not included in the Union list may be placed on the market as such and used in or on food until 18 months after the date of application of the Union list. Since flavouring substances are already on the market in the Member States, provision should be made to ensure that the transition to a Union authorisation procedure is smooth. To increase legal certainty, a transitional period should be provided also for food containing those flavouring substances.
- (7) As a second step, the flavourings and source materials referred to in Article 9(b) to (f) must be evaluated. The interested parties are to submit applications for updating the Union list by adding a substance to the list pursuant to Regulation (EC) No 1331/2008 and are to follow Commission Regulation (EU) No 234/2011 of 10 March 2011 implementing Regulation (EC) No 1331/2008 of the European Parliament and of the Council establishing a common authorisation procedure for food additives, food enzymes and food flavourings⁽⁴⁾ as to the data required and as to the content, drafting and presentation of the applications for authorisation of flavourings and source materials listed in Article 9(b) to (f) of Regulation (EC) No 1334/2008.
- (8) In accordance with the objectives of Regulation (EC) No 1334/2008, in order to enhance legal certainty and non-discrimination it is appropriate to adopt transitional measures to allow the time for evaluation and authorisation of those flavourings and source materials.
- (9) The date of application of Parts B to F of Annex I to Regulation (EC) No 1334/2008, concerning flavourings and source materials listed in Article 9(b) to (f) of that Regulation, should be postponed to allow the time for evaluation and authorisation of those flavourings and source materials.
- (10) The interested parties should submit applications for authorisations within a set time limit as regards flavourings and source materials listed in Article 9(b) to (f) of Regulation (EC) No 1334/2008 that are currently placed on the market.

⁽¹⁾ OJ L 354, 31.12.2008, p. 34.⁽²⁾ See page 1 of this Official Journal.⁽³⁾ OJ L 299, 23.11.1996, p. 1.⁽⁴⁾ OJ L 64, 11.3.2011, p. 15.

(11) Pursuant to Regulation (EC) No 1334/2008 flavourings and source materials listed in Article 9(b) to (f) not included in the Union list may be placed on the market as such and used in or on food until 18 months after the date of application of the Union list. Since flavourings and source materials listed in Article 9(b) to (f) of Regulation (EC) No 1334/2008 are already on the market in the Member States, provision should be made to ensure that the transition to a Union authorisation procedure is smooth. To increase legal certainty, a transitional period should be provided also for food containing those flavourings and source materials.

(12) Article 30 of Regulation (EC) No 1334/2008 specifies that Articles 26 and 28 of Regulation (EC) No 1334/2008 concerning amendments to Council Regulation (EEC) No 1601/91 of 10 June 1991 laying down general rules on the definition, description and presentation of aromatised wines, aromatised wine-based drinks and aromatised wine-product cocktails⁽⁵⁾ and to Regulation (EC) No 110/2008 of the European Parliament and of the Council of 15 January 2008 on the definition, description, presentation, labelling and the protection of geographical indications of spirit drinks⁽⁶⁾ are to apply from the date of application of the Union list. It is therefore appropriate to fix that date of application for the purposes of the fourth paragraph of Article 30 of Regulation (EC) No 1334/2008.

(13) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health and neither the European Parliament nor the Council have opposed them,

HAS ADOPTED THIS REGULATION:

CHAPTER I

FLAVOURING SUBSTANCES REFERRED TO IN ARTICLE 9(a) OF REGULATION (EC) No 1334/2008

Article 1

Transitional measures for food containing flavouring substances

Foods containing flavouring substances, which are lawfully placed on the market or labelled prior to 22 October 2014 but which do not comply with Part A of Annex I to Regulation (EC) No 1334/2008 may be marketed until their date of minimum durability or use-by-date.

⁽⁵⁾ OJ L 149, 14.6.1991, p. 1.

⁽⁶⁾ OJ L 39, 13.2.2008, p. 16.

CHAPTER II

FLAVOURINGS AND SOURCE MATERIALS REFERRED TO IN ARTICLE 9(b) TO (f) OF REGULATION (EC) No 1334/2008

Article 2

Date of application of Parts B to F of the Union list of flavourings and source materials

For the purposes of the third paragraph of Article 30 in conjunction with Article 10 of Regulation (EC) No 1334/2008, Parts B to F of the Union list of flavourings and source materials set out in Annex I to that Regulation, shall apply from 22 October 2016.

Article 3

Time limit for submissions

Interested parties shall submit applications for authorisation of flavourings and source materials referred to in Article 9(b) to (f) of Regulation (EC) No 1334/2008 placed on the market at the time of entry into force of this Regulation to the Commission in accordance with the Regulation (EC) No 1331/2008 at the latest by 22 October 2015.

Article 4

Transitional measure for food containing flavourings and source materials referred to in Article 9(b) to (f) of Regulation (EC) No 1334/2008

Foods containing flavourings and source materials referred to in Article 9(b) to (f) of Regulation (EC) No 1334/2008 which are lawfully placed on the market or labelled prior to 22 April 2018 but which do not comply with Parts B to F of Annex I to Regulation (EC) No 1334/2008, may be marketed until their date of minimum durability or use-by-date.

CHAPTER III

FINAL PROVISIONS

Article 5

Amendments to Regulations (EEC) No 1601/91 and (EC) No 110/2008

For the purposes of the fourth paragraph of Article 30 of Regulation (EC) No 1334/2008, concerning amendments to Regulations (EEC) No 1601/91 and (EC) No 110/2008, the date of application of the Union list of flavourings and source materials shall be 22 April 2013.

*Article 6***Entry into force**

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 1 October 2012.

For the Commission
The President
José Manuel BARROSO

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For further information on the European Union, see: <http://europa.eu>

