

COMMISSION IMPLEMENTING REGULATION (EU) 2022/1250

of 19 July 2022

concerning the authorisation of ethyl acrylate, pentyl isovalerate, butyl 2-methyl butyrate, 2-methylundecanal, (2E)-methylcrotonic acid, ethyl (E,Z)-deca-2,4-dienoate, butan-2-one, cyclohexyl acetate, 3,4-dimethylcyclopentan-1,2-dione, 5-ethyl-3-hydroxy-4-methylfuran-2(5H)-one, phenethyl butyrate, hexyl phenylacetate, 4-methylacetophenone, 4-methoxyacetophenone, 3-methylphenol, 3,4-dimethylphenol, 1-methoxy-4-methylbenzene, trimethyloxazole and 4,5-dihydrothiophen-3(2H)-one as feed additives for all animal species

(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 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition ⁽¹⁾, and in particular Article 9(2) thereof,

Whereas:

- (1) Regulation (EC) No 1831/2003 provides for the authorisation of additives for use in animal nutrition and for the grounds and procedures for granting such an authorisation. Article 10(2) of that Regulation provides for the re-evaluation of additives authorised pursuant to Council Directive 70/524/EEC ⁽²⁾.
- (2) The substances ethyl acrylate, pentyl isovalerate, butyl 2-methyl butyrate, 2-methylundecanal, (2E)-methylcrotonic acid, ethyl (E,Z)-deca-2,4-dienoate, butan-2-one, cyclohexyl acetate, 3,4-dimethylcyclopentan-1,2-dione, 5-ethyl-3-hydroxy-4-methylfuran-2(5H)-one, phenethyl butyrate, hexyl phenylacetate, 4-methylacetophenone, 4-methoxyacetophenone, 3-methylphenol, 3,4-dimethylphenol, 1-methoxy-4-methylbenzene, trimethyloxazole and 4,5-dihydrothiophen-3(2H)-one were authorised without a time limit in accordance with Directive 70/524/EEC as a feed additives for all animal species. Those substances were subsequently entered in the Register of feed additives as existing products, in accordance with Article 10(1)(b) of Regulation (EC) No 1831/2003.
- (3) In accordance with Article 10(2) of Regulation (EC) No 1831/2003 in conjunction with Article 7 thereof, several applications were submitted for the re-evaluation of those additives for all animal species.
- (4) The applicant requested the additives to be authorised for use also in water for drinking. However, Regulation (EC) No 1831/2003 does not allow the authorisation of flavouring compounds for use in water for drinking. Therefore, the use of these additives in water for drinking should not be allowed.
- (5) The applicant requested the additives to be classified in the additive category 'sensory additives' and in the functional group 'flavouring compounds'. Those applications were accompanied by the particulars and documents required under Article 7(3) of Regulation (EC) No 1831/2003.

⁽¹⁾ OJ L 268, 18.10.2003, p. 29.⁽²⁾ Council Directive 70/524/EEC of 23 November 1970 concerning additives in feedingstuffs (OJ L 270, 14.12.1970, p. 1).

- (6) The European Food Safety Authority ('the Authority') concluded in its opinions of 1 February 2012 ⁽³⁾, 7 March 2012 ⁽⁴⁾, 25 April 2012 ⁽⁵⁾, 17 October 2012 ⁽⁶⁾, 12 March 2013 ⁽⁷⁾, 5 March 2014 ⁽⁸⁾, 20 October 2015 ⁽⁹⁾, 26 January 2016 ⁽¹⁰⁾, 8 March 2016 ⁽¹¹⁾, 20 April 2016 ⁽¹²⁾, 25 May 2016 ⁽¹³⁾, 12 July 2016 ⁽¹⁴⁾ and 19 October 2016 ⁽¹⁵⁾, that, under the proposed conditions of use, the additives do not have adverse effects on animal health, consumer health or the environment. The Authority also concluded that the additives should be considered as irritants to skin, eyes and respiratory tract and as skin sensitizers. Therefore, the Commission considers that appropriate protective measures should be taken to prevent adverse effects on human health, in particular as regards the users of the additive.
- (7) The Authority concluded, that the additives are recognised to flavour food and its function in feed would be essentially the same as that in food, therefore, no further demonstration of efficacy is considered necessary. It also verified the report on the methods of analysis of the feed additives in feed submitted by the Reference Laboratory set up by Regulation (EC) No 1831/2003.
- (8) The assessment of the additives shows that the conditions for authorisation, as provided for in Article 5 of Regulation (EC) No 1831/2003, are satisfied. Accordingly, the use of those substances should be authorised as specified in the Annex to this Regulation.
- (9) Certain conditions should be provided for to allow better control. In particular, a recommended content should be indicated on the label of the feed additives. Where such content is exceeded, certain information should be indicated on the label of premixtures.
- (10) The fact that the additives are not authorised for use as a flavourings in water for drinking does not preclude their use in compound feed which is administered via water.
- (11) Since safety reasons do not require the immediate application of the modifications to the conditions of authorisation of the substances concerned, it is appropriate to allow a transitional period for interested parties to prepare themselves to meet the new requirements resulting from the authorisation.
- (12) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

HAS ADOPTED THIS REGULATION:

Article 1

Authorisation

The substances specified in the Annex, belonging to the additive category 'sensory additives' and to the functional group 'flavouring compounds', are authorised as additives in animal nutrition, subject to the conditions laid down in that Annex.

⁽³⁾ EFSA Journal 2012;10(2):2573.

⁽⁴⁾ EFSA Journal 2012;10(3):2625.

⁽⁵⁾ EFSA Journal 2012;10(5):2678.

⁽⁶⁾ EFSA Journal 2012;10(10):2927.

⁽⁷⁾ EFSA Journal 2013;11(4):3169.

⁽⁸⁾ EFSA Journal 2014;12(3):3608.

⁽⁹⁾ EFSA Journal 2015;13(11):4268.

⁽¹⁰⁾ EFSA Journal 2016;14(2):4390.

⁽¹¹⁾ EFSA Journal 2016;14(6):4441.

⁽¹²⁾ EFSA Journal 2016;14(6):4475.

⁽¹³⁾ EFSA Journal 2016;14(6):4512.

⁽¹⁴⁾ EFSA Journal 2016;14(8):4557.

⁽¹⁵⁾ EFSA Journal 2016;14(11):4618.

*Article 2***Transitional measures**

1. The substances specified in the Annex and premixtures containing these substances, which are produced and labelled before 9 February 2023 in accordance with the rules applicable before 9 August 2022 may continue to be placed on the market and used until the existing stocks are exhausted.
2. Compound feed and feed materials containing these substances as specified in the Annex which are produced and labelled before 9 August 2023 in accordance with the rules applicable before 9 August 2022 may continue to be placed on the market and used until the existing stocks are exhausted if they are intended for food-producing animals.
3. Compound feed and feed materials containing these substances as specified in the Annex which are produced and labelled before 9 August 2024 in accordance with the rules applicable before 9 August 2022 may continue to be placed on the market and used until the existing stocks are exhausted if they are intended for non-food-producing animals.

*Article 3***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, 19 July 2022.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b09037	Ethyl acrylate	<p><i>Additive composition</i> Ethyl acrylate <i>Characterisation of active substance</i> Ethyl acrylate Produced by chemical synthesis Purity: 97 % Chemical formula: C₅H₈O₂ CAS number: 140-88-5 FLAVIS: 09.037</p> <p><i>Analytical method ⁽¹⁾</i> For the identification of ethyl acrylate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — pigs and poultry: 1 mg; — other species or categories of animals: 1,5 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
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⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b09499	Pentyl isovalerate	<p><i>Additive composition</i> Pentyl isovalerate</p> <p><i>Characterisation of active substance</i> Pentyl isovalerate Produced by chemical synthesis Purity: 98 % Chemical formula: C₁₀H₂₀O₂ CAS number: 25415-62-7 FLAVIS: 09.499</p> <p><i>Analytical method ⁽¹⁾</i> For the identification of pentyl isovalerate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — pigs and poultry: 1 mg; — other species or categories of animals: 1,5 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
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Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b09519	Butyl 2-methyl butyrate	<p><i>Additive composition</i> Butyl 2-methyl butyrate</p> <p><i>Characterisation of active substance</i> Butyl 2-methyl butyrate Produced by chemical synthesis Purity: 95 % Chemical formula: $C_9H_{18}O_2$ CAS number: 15706-73-7 FLAVIS: 09.519</p> <p><i>Analytical method ⁽¹⁾</i> For the identification of butyl 2-methyl butyrate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — pigs and poultry: 1 mg; — other species or categories of animals: 1,5 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
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⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b05077	2-Methylundecanal	Additive composition 2-Methylundecanal <i>Characterisation of active substance</i> 2-Methylundecanal Produced by chemical synthesis Purity: 97 % Chemical formula: $C_{12}H_{24}O$ CAS number: 110-41-8 FLAVIS: 05.077	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — pigs and poultry: 1 mg; — other species or categories of animals: 1,5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of 2-methylundecanal in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.		-	-	-		

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives

Functional group: Flavouring compounds

2b08064	(2E)-Methylcrotonic acid	<p><i>Additive composition</i> (2E)-Methylcrotonic acid</p> <p><i>Characterisation of active substance</i> (2E)-Methylcrotonic acid Produced by chemical synthesis Purity: min. 99 % Chemical formula: C₅H₈O₂ CAS number: 80-59-1 FLAVIS: 08.064</p> <p><i>Analytical method ⁽¹⁾</i> For the identification of (2E)-methylcrotonic acid in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — marine animals: 0,05 mg; — other species or categories of animals: 1 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
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⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b09260	Ethyl (E,Z)-deca-2,4-dienoate	<i>Additive composition</i> Ethyl (E,Z)-deca-2,4-dienoate <i>Characterisation of active substance</i> Ethyl (E,Z)-deca-2,4-dienoate Produced by chemical synthesis Purity: min. 90 % Chemical formula: $C_{12}H_{20}O_2$ CAS number: 3025-30-7 FLAVIS: 09.260	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — marine animals: 0,05 mg; — other species or categories of animals: 1 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		<i>Analytical method ⁽¹⁾</i> For the identification of ethyl (EZ)-deca-2,4-dienoate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b07053	Butan-2-one	<p><i>Additive composition</i> Butan-2-one</p> <p><i>Characterisation of active substance</i> Butan-2-one Produced by chemical synthesis Purity: min. 99,5 % Chemical formula: C₄H₈O CAS number: 78-93-3 FLAVIS: 07.053</p> <p><i>Analytical method ⁽¹⁾</i> For the identification of butan-2-one in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — pigs and poultry: 1 mg; — other species or categories of animals: 1,5 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
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⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b09027	Cyclohexyl acetate	Additive composition Cyclohexyl acetate <i>Characterisation of active substance</i> Cyclohexyl acetate Produced by chemical synthesis Purity: > 98 % Chemical formula: $C_8H_{14}O_2$ CAS number: 622-45-7 FLAVIS: 09.027	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — marine animals: 0,05 mg; — other species or categories of animals: 1 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of cyclohexyl acetate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b07075	3,4-Dimethylcyclopentan-1,2-dione	<p><i>Additive composition</i> 3,4-Dimethylcyclopentan-1,2-dione</p> <p><i>Characterisation of active substance</i> 3,4-Dimethylcyclopentan-1,2-dione Produced by chemical synthesis Purity: > 98 % Chemical formula: $C_7H_{10}O_2$ CAS number: 13494-06-9 FLAVIS: 07.075</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — cats and dogs: 5 mg; — marine animals: 0,05 mg — other species or categories of animals: 0,5 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
		<p><i>Analytical method ⁽¹⁾</i> For the identification of 3,4-dimethylcyclopentan-1,2-dione in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b10023	5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one	<p><i>Additive composition</i> 5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one</p> <p><i>Characterisation of active substance</i> 5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one Produced by chemical synthesis Purity: 95 % Chemical formula: C₇H₁₀O₃ CAS number: 698-10-2 FLAVIS: 10.023</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — marine animals: 0,05 mg; — poultry and pigs: 0,05 mg; — other species or categories of animals: 0,08 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
		<p><i>Analytical method ⁽¹⁾</i> For the identification of 5-ethyl-3-hydroxy-4-methylfuran-2(5H)-one in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b09168	Phenethyl butyrate	Additive composition Phenethyl butyrate <i>Characterisation of active substance</i> Phenethyl butyrate Produced by chemical synthesis Purity: 97 % Chemical formula: $C_{12}H_{16}O_2$ CAS number: 103-52-6 FLAVIS: 09.168	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — pigs and poultry: 1 mg; — other species or categories of animals: 1,5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of phenethyl butyrate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.		-	-	-		

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b09804	Hexyl phenylacetate	<i>Additive composition</i> Hexyl phenylacetate <i>Characterisation of active substance</i> Hexyl phenylacetate Produced by chemical synthesis Purity: 97 % Chemical formula: $C_{14}H_{20}O_2$ CAS number: 5421-17-0 FLAVIS: 09.804	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — pigs and poultry: 1 mg; — other species or categories of animals: 1,5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		<i>Analytical method ⁽¹⁾</i> For the identification of hexyl phenylacetate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.		-	-	-		

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b07022	4-Methylacetophenone	Additive composition 4-Methylacetophenone <i>Characterisation of active substance</i> 4-Methylacetophenone Produced by chemical synthesis Purity: > 95 % Chemical formula: $C_9H_{10}O$ CAS number: 122-00-9 FLAVIS: 07.022	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — marine animals: 0,05 mg; — cats: 1 mg; — other species or categories of animals: 5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of 4-methylacetophenone in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives

Functional group: Flavouring compounds

2b07038	4-Methoxyacetophenone	Additive composition 4-Methoxyacetophenone <i>Characterisation of active substance</i> 4-Methoxyacetophenone Produced by chemical synthesis Purity: > 97 % Chemical formula: $C_9H_{10}O_2$ CAS number: 100-06-1 FLAVIS: 07.038	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — marine animals: 0,05 mg; — cats: 1 mg; — other species or categories of animals: 5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of 4-methoxyacetophenone in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives

Functional group: Flavouring compounds

2b04026	3-Methylphenol	Additive composition 3-Methylphenol <i>Characterisation of active substance</i> 3-Methylphenol Produced by chemical synthesis Purity: 98 % Chemical formula: C_7H_8O CAS number: 108-39-4 FLAVIS: 04.026	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: 5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of 3-methylphenol in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b04048	3,4-Dimethylphenol	Additive composition 3,4-Dimethylphenol <i>Characterisation of active substance</i> 3,4-Dimethylphenol Produced by chemical synthesis Purity: 98 % Chemical formula: $C_8H_{10}O$ CAS number: 95-65-8 FLAVIS: 04.048	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: 5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of 3,4-dimethylphenol in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b04015	1-Methoxy-4-methylbenzene	<p><i>Additive composition</i> 1-Methoxy-4-methylbenzene</p> <p><i>Characterisation of active substance</i> 1-Methoxy-4-methylbenzene Produced by chemical synthesis Purity: 99 % Chemical formula: C₈H₁₀O CAS number: 104-93-8 FLAVIS: 04.015</p> <p><i>Analytical method ⁽¹⁾</i> For the identification of 1-methoxy-4-methylbenzene in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species	-	-	-	<p>1. The additive shall be incorporated into the feed in the form of a premixture.</p> <p>2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated.</p> <p>3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: 1 mg.'</p> <p>4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3.</p> <p>5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.</p>	9 August 2032
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⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives**Functional group: Flavouring compounds**

2b13169	Trimethyloxazole	Additive composition Trimethyloxazole <i>Characterisation of active substance</i> Trimethyloxazole Produced by chemical synthesis Purity: > 95 % Chemical formula: C_6H_9ON CAS number: 20662-84-4 FLAVIS: 13.169	All animal species	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 3. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — marine animals: 0,05 mg; — poultry and pigs: 0,3 mg; — other species or categories of animals: 0,5 mg.' 4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. 5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	9 August 2032
		Analytical method ⁽¹⁾ For the identification of trimethyloxazole in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.						

⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en

Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			

Category: Sensory additives

Functional group: Flavouring compounds

2b15012	4,5-Dihydrothiophen-3(2H)-one	<p><i>Additive composition</i> 4,5-Dihydrothiophen-3 (2H)-one</p> <p><i>Characterisation of active substance</i> 4,5-Dihydrothiophen-3 (2H)-one Produced by chemical synthesis. Purity: 97 % Chemical formula: C₄H₆OS CAS number: 1003-04-9 FLAVIS: 15.012</p> <p><i>Analytical method ⁽¹⁾</i> For the identification of 4,5-dihydrothiophen-3 (2H)-one in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: 0,05 mg.' The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection. 	9 August 2032
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⁽¹⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en