

COMMISSION IMPLEMENTING REGULATION (EU) 2017/54

of 14 December 2016

concerning the authorisation of 2-methylpropan-1-ol, isopentanol, 3,7-dimethyloctan-1-ol, 2-ethylhexan-1-ol, 2-methylpropanal, 3-methylbutanal, 2-methylbutyraldehyde, 3-methylbutyric acid, 2-methylvaleric acid, 2-ethylbutyric acid, 2-methylbutyric acid, 2-methylheptanoic acid, 4-methylnonanoic acid, 4-methyloctanoic acid, isobutyl acetate, isobutyl butyrate, 3-methylbutyl hexanoate, 3-methylbutyl dodecanoate, 3-methylbutyl octanoate, 3-methylbutyl propionate, 3-methylbutyl formate, glyceryl tributyrate, isobutyl isobutyrate, isopentyl isobutyrate, isobutyl isovalerate, isopentyl 2-methylbutyrate, 2-methylbutyl isovalerate and 2-methylbutyl butyrate 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 authorisation. Article 10 of that Regulation provides for the re-evaluation of additives authorised pursuant to Council Directive 70/524/EEC ⁽²⁾.
- (2) 2-Methylpropan-1-ol, isopentanol, 3,7-dimethyloctan-1-ol, 2-ethylhexan-1-ol, 2-methylpropanal, 3-methylbutanal, 2-methylbutyraldehyde, 3-methylbutyric acid, 2-methylvaleric acid, 2-ethylbutyric acid, 2-methylbutyric acid, 2-methylheptanoic acid, 4-methylnonanoic acid, 4-methyloctanoic acid, isobutyl acetate, isobutyl butyrate, 3-methylbutyl hexanoate, 3-methylbutyl dodecanoate, 3-methylbutyl octanoate, 3-methylbutyl propionate, 3-methylbutyl formate, glyceryl tributyrate, isobutyl isobutyrate, isopentyl isobutyrate, isobutyl isovalerate, isopentyl 2-methylbutyrate, 2-methylbutyl isovalerate and 2-methylbutyl butyrate, hereinafter referred to as 'the substances concerned' were authorised without a time limit in accordance with Directive 70/524/EEC as feed additives for all animal species. Those products were subsequently entered in the Register of feed additives as existing products, in accordance with Article 10(1) 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, an application was submitted for the re-evaluation of the substances concerned as feed additives for all animal species. The applicant requested those additives to be classified in the additive category 'sensory additives'. This application was accompanied by the particulars and documents required under Article 7(3) of Regulation (EC) No 1831/2003.
- (4) The European Food Safety Authority ('the Authority') concluded in its opinion of 17 October 2012 ⁽³⁾ that, under the proposed conditions of use in feed, the substances concerned do not have adverse effects on animal health, human health or the environment. The Authority further concluded that those substances are flavouring agents authorised in food for which the efficacy is demonstrated as the functions of the additive applied for feed use and described for food use are similar.
- (5) The Authority concluded that no safety concerns would arise for users provided that appropriate protective measures are taken. The Authority does not consider that there is a need for specific requirements of post-market monitoring. It also verified the report on the Method of analysis of the feed additives in feed submitted by the Reference Laboratory set up by 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).⁽³⁾ EFSA Journal 2012;10(10):2927.

- (6) The assessment of the substances concerned 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. Maximum recommended contents should be set up for those substances. Those substances may be used within a compound feed subsequently administered via water.
- (7) Since safety reasons do not require the immediate application of the modifications to the conditions of authorisation for 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.
- (8) 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 feed additives in animal nutrition subject to the conditions laid down in that Annex.

Article 2

Transitional measures

1. The substances specified in the Annex and premixtures containing those substances, which are produced and labelled before 6 August 2017 in accordance with the rules applicable before 6 February 2017 may continue to be placed on the market and used until the existing stocks are exhausted.
2. Compound feed and feed materials containing the substances specified in the Annex which are produced and labelled before 6 February 2018 in accordance with the rules applicable before 6 February 2017 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 the substances specified in the Annex which are produced and labelled before 6 February 2019 in accordance with the rules applicable before 6 February 2017 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, 14 December 2016.

For the Commission

The President

Jean-Claude JUNKER

ANNEX

Identification number of the additive	Name of the holder of authorisation	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 active substance/kg of complete feedingstuff with a moisture content of 12 %			
(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)

Category: Sensory additives. Functional group: Flavouring compounds

2b02001	—	2-Methylpropan-1-ol	<i>Additive composition</i> 2-Methylpropan-1-ol <i>Characterisation of the active substance</i> 2-Methylpropan-1-ol Produced by chemical synthesis Purity: min. 98 % Chemical formula: C₄H₁₀O CAS number 78-83-1 FLAVIS 02.001 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Methylpropan-1-ol in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027
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(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment.	
2b02003	—	Isopentanol	<i>Additive composition</i> Isopentanol <i>Characterisation of the active substance</i> Isopentanol Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₅ H ₁₂ O CAS number 123-51-3 FLAVIS 02.003 <i>Method of analysis</i> ⁽¹⁾ For the determination of Isopentanol in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b02026	—	3,7-Dimethyloctan-1-ol	<i>Additive composition</i> 3,7-Dimethyloctan-1-ol <i>Characterisation of the active substance</i> 3,7-Dimethyloctan-1-ol Produced by chemical synthesis Purity: min. 90 % Chemical formula: C ₁₀ H ₂₂ O CAS number 106-21-8 FLAVIS 02.026 <i>Method of analysis</i> ⁽¹⁾ For the identification of 3,7-Dimethyloctan-1-ol in the feed additive and flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be: for pigs and poultry: 1 mg/kg, and for all other species and categories: 1,5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b02082	—	2-Ethylhexan-1-ol	<i>Additive composition</i> 2-Ethylhexan-1-ol <i>Characterisation of the active substance</i> 2-Ethylhexan-1-ol Produced by chemical synthesis Purity: min. 97 % Chemical formula: C ₈ H ₁₈ O CAS number 104-76-7 FLAVIS 02.082 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Ethylhexan-1-ol in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b05004	—	2-Methylpropanal	<i>Additive composition</i> 2-Methylpropanal <i>Characterisation of the active substance</i> 2-Methylpropanal Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₄ H ₈ O CAS number 78-84-2 FLAVIS 05.004 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Methylpropanal in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b05006	—	3-Methylbutanal	<i>Additive composition</i> 3-Methylbutanal <i>Characterisation of the active substance</i> 3-Methylbutanal Produced by chemical synthesis Purity: min. 95 % Chemical formula: C ₅ H ₁₀ O CAS number 590-86-3 FLAVIS 05.006 <i>Method of analysis</i> ⁽¹⁾ For the determination of 3-Methylbutanal in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b05049	—	2-Methylbutyraldehyde	<i>Additive composition</i> 2-Methylbutyraldehyde <i>Characterisation of the active substance</i> 2-Methylbutyraldehyde Produced by chemical synthesis Purity: min. 97 % Chemical formula: C ₅ H ₁₀ O CAS number 96-17-3 FLAVIS 05.049 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Methylbutyraldehyde in the feed additive and in feed flavouring premixtures. Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b08008	—	3-Methylbutyric acid	<i>Additive composition</i> 3-Methylbutyric acid <i>Characterisation of the active substance</i> 3-Methylbutyric acid Produced by chemical synthesis Purity: min. 99 % Chemical formula: C ₅ H ₁₀ O ₂ CAS number 503-74-2 FLAVIS 08.008 <i>Method of analysis</i> ⁽¹⁾ For the determination of 3-Methylbutyric acid in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b08031	—	2-Methylvaleric acid	<i>Additive composition</i> 2-Methylvaleric acid <i>Characterisation of the active substance</i> 2-Methylvaleric acid Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₆ H ₁₂ O ₂ CAS number 97-61-0 FLAVIS 08.031 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Methylvaleric acid in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b08045	—	2-Ethylbutyric acid	<i>Additive composition</i> 2-Ethylbutyric acid <i>Characterisation of the active substance</i> 2-Ethylbutyric acid Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₆ H ₁₂ O ₂ CAS number 88-09-5 FLAVIS 08.045 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Ethylbutyric acid in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b08046	—	2-Methylbutyric acid	<i>Additive composition</i> 2-Methylbutyric acid <i>Characterisation of the active substance</i> 2-Methylbutyric acid Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₅ H ₁₀ O ₂ CAS number 116-53-0 FLAVIS 08.046 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Methylbutyric acid in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b08047	—	2-Methylheptanoic acid	<i>Additive composition</i> 2-Methylheptanoic acid <i>Characterisation of the active substance</i> 2-Methylheptanoic acid Produced by chemical synthesis Purity: min. 97 % Chemical formula: C ₈ H ₁₆ O ₂ CAS number 1188-02-9 FLAVIS 08.047 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Methylheptanoic acid in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b08062	—	4-Methylnonanoic acid	<i>Additive composition</i> 4-Methylnonanoic acid <i>Characterisation of the active substance</i> 4-Methylnonanoic acid Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₁₀ H ₂₀ O ₂ CAS number 45019-28-1 FLAVIS 08.062 <i>Method of analysis</i> ⁽¹⁾ For the identification of 4-Methylnonanoic acid in the feed additive and flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be: for pigs and poultry: 1 mg/kg, and for all other species and categories: 1,5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b08063	—	4-Methyloctanoic acid	<i>Additive composition</i> 4-Methyloctanoic acid <i>Characterisation of the active substance</i> 4-Methyloctanoic acid Produced by chemical synthesis Purity: min. 97 % Chemical formula: C ₉ H ₁₈ O ₂ CAS number 54947-74-9 FLAVIS 08.063 <i>Method of analysis</i> ⁽¹⁾ For the determination of 4-Methyloctanoic acid in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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2b09005	—	Isobutyl acetate	<i>Additive composition</i> Isobutyl acetate <i>Characterisation of the active substance</i> Isobutyl acetate Produced by chemical synthesis Purity: min. 95 % Chemical formula: C₆H₁₂O₂ CAS number 110-19-0 FLAVIS 09.005 <i>Method of analysis</i> ⁽¹⁾ For the determination of Isobutyl acetate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

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								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment.	
2b09043	—	Isobutyl butyrate	<i>Additive composition</i> Isobutyl butyrate <i>Characterisation of the active substance</i> Isobutyl butyrate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₈ H ₁₆ O ₂ CAS number 539-90-2 FLAVIS 09.043 <i>Method of analysis</i> ⁽¹⁾ For the determination of Isobutyl butyrate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09070	—	3-Methylbutyl hexanoate	<i>Additive composition</i> 3-Methylbutyl hexanoate <i>Characterisation of the active substance</i> 3-Methylbutyl hexanoate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₁₁ H ₂₂ O ₂ CAS number 2198-61-0 FLAVIS 09.070 <i>Method of analysis ⁽¹⁾</i> For the identification of 3-Methylbutyl hexanoate in the feed additive and flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be: for pigs and poultry: 1 mg/kg, and for all other species and categories: 1,5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09103	—	3-Methylbutyl dodecanoate	<i>Additive composition</i> 3-Methylbutyl dodecanoate <i>Characterisation of the active substance</i> 3-Methylbutyl dodecanoate Produced by chemical synthesis Purity: min. 97 % Chemical formula: C ₁₇ H ₃₄ O ₂ CAS number 6309-51-9 FLAVIS 09.103 <i>Method of analysis</i> ⁽¹⁾ For the identification of 3-Methylbutyl dodecanoate in the feed additive and flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be: for pigs and poultry: 1 mg/kg, and for all other species and categories: 1,5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09120	—	3-Methylbutyl octanoate	<i>Additive composition</i> 3-Methylbutyl octanoate <i>Characterisation of the active substance</i> 3-Methylbutyl octanoate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₁₃ H ₂₆ O ₂ CAS number 2035-99-6 FLAVIS 09.120 <i>Method of analysis</i> ⁽¹⁾ For the identification of 3-Methylbutyl octanoate in the feed additive and flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be: for pigs and poultry: 1 mg/kg, and for all other species and categories: 1,5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09136	—	3-Methylbutyl propionate	<i>Additive composition</i> 3-Methylbutyl propionate <i>Characterisation of the active substance</i> 3-Methylbutyl propionate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₈ H ₁₆ O ₂ CAS number 105-68-0 FLAVIS 09.136 <i>Method of analysis</i> ⁽¹⁾ For the determination of 3-Methylbutyl propionate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09162	—	3-Methylbutyl formate	<i>Additive composition</i> 3-Methylbutyl formate <i>Characterisation of the active substance</i> 3-Methylbutyl formate Produced by chemical synthesis Purity: min. 92 % Chemical formula: C ₆ H ₁₂ O ₂ CAS number 110-45-2 FLAVIS 09.162 <i>Method of analysis</i> ⁽¹⁾ For the determination of 3-Methylbutyl formate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09211	—	Glyceryl tri- butyrate	<i>Additive composition</i> Glyceryl tributyrat <i>Characterisation of the active substance</i> Glyceryl tributyrat Produced by chemical synthesis Purity: min. 99 % Chemical formula: C ₁₅ H ₂₆ O ₆ CAS number 60-01-5 FLAVIS 09.211 <i>Method of analysis</i> ⁽¹⁾ For the determination of Glyceryl tributyrat in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09417	—	Isobutyl isobutyrate	<i>Additive composition</i> Isobutyl isobutyrate <i>Characterisation of the active substance</i> Isobutyl isobutyrate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₈ H ₁₆ O ₂ CAS number 97-85-8 FLAVIS 09.417 <i>Method of analysis</i> ⁽¹⁾ For the determination of Isobutyl isobutyrate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment.	
2b09419	—	Isopentyl isobutyrate	<i>Additive composition</i> Isopentyl isobutyrate <i>Characterisation of the active substance</i> Isopentyl isobutyrate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₉ H ₁₈ O ₂ CAS number 2050-01-3 FLAVIS 09.419 <i>Method of analysis</i> ⁽¹⁾ For the determination of Isopentyl isobutyrate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09472	—	Isobutyl isovalerate	<i>Additive composition</i> Isobutyl isovalerate <i>Characterisation of the active substance</i> Isobutyl isovalerate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₉ H ₁₈ O ₂ CAS number 589-59-3 FLAVIS 09.472 <i>Method of analysis</i> ⁽¹⁾ For the determination of Isobutyl isovalerate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09530	—	Isopentyl 2-methylbutyrate	<i>Additive composition</i> Isopentyl 2-methylbutyrate <i>Characterisation of the active substance</i> Isopentyl 2-methylbutyrate Produced by chemical synthesis Purity: min. 95 % Chemical formula: C ₁₀ H ₂₀ O ₂ CAS number 27625-35-0 FLAVIS 09.530 <i>Method of analysis</i> (1) For the determination of Isopentyl 2-methylbutyrate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09531	—	2-Methylbutyl isovalerate	<i>Additive composition</i> 2-Methylbutyl isovalerate <i>Characterisation of the active substance</i> 2-Methylbutyl isovalerate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₁₀ H ₂₀ O ₂ CAS number 2445-77-4 FLAVIS 09.531 <i>Method of analysis ⁽¹⁾</i> For the determination of 2-Methylbutyl isovalerate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	
2b09659	—	2-Methylbutyl butyrate	<i>Additive composition</i> 2-Methylbutyl butyrate <i>Characterisation of the active substance</i> 2-Methylbutyl butyrate Produced by chemical synthesis Purity: min. 95 % Chemical formula: C ₉ H ₁₈ O ₂ CAS number 51115-64-1 FLAVIS 09.659 <i>Method of analysis</i> ⁽¹⁾ For the determination of 2-Methylbutyl butyrate in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	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 and stability conditions shall be indicated. 3. The recommended maximum content of the active substance shall be 5 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive, the recommended maximum content of the active substance in complete feed shall be indicated. 5. Where the maximum recommended content is exceeded; the name of the functional group, the name of the additive, the identification number and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compounds feedingstuff.	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)
								6. For users of the additive and premixtures, feed business operators, shall establish operational procedures and appropriate organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where risks cannot be reduced to an acceptable level by these procedures and measures, the additive and premixtures shall be used with appropriate personal protective equipment	

(¹) Details of the analytical methods are available at the following address of the Reference Laboratory: <https://ec.europa.eu/jrc/en/eurl/feed-additives/evaluation-reports>