COMMISSION IMPLEMENTING REGULATION (EU) 2017/62

of 14 December 2016

concerning the authorisation of 3-(methylthio) propionaldehyde, methyl 3-(methylthio) propionate, allylthiol, dimethyl sulfide, dibutyl sulfide, diallyl disulfide, diallyl trisulfide, dimethyl trisulfide, dipropyl disulfide, allyl isothiocyanate, dimethyl disulfide, 2-methylbenzene-1-thiol, S-methyl butanethioate, allyl methyl disulfide, 3-(methylthio) propan-1-ol, 3-(methylthio) hexan-1ol, 1-propane-1-thiol, diallyl sulfide, 2,4-dithiapentane, 2-methyl-2-(methyldithio) propanal, 2-methylpropane-1-thiol, methylsulfinyl methane, propane-2-thiol, 3,5-dimethyl-1,2,4-trithiolane and 2-methyl-4-propyl-1,3-oxathiane 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:

- 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) 3-(Methylthio) propionaldehyde, methyl 3-(methylthio) propionate, allylthiol, dimethyl sulfide, dibutyl sulfide, diallyl disulfide, diallyl trisulfide, dimethyl trisulfide, dipropyl disulfide, allyl isothiocyanate, dimethyl disulfide, 2-methylbenzene-1-thiol, S-methyl butanethioate, allyl methyl disulfide, 3-(methylthio) propan-1-ol, 3-(methylthio) hexan-1-ol, 1-propane-1-thiol, diallyl sulfide, 2,4-dithiapentane, 2-methyl-2-(methyldithio) propanal, 2-methylpropane-1-thiol, methylsulfinyl methane, propane-2-thiol, 3,5-dimethyl-1,2,4-trithiolane and 2-methyl-4-propyl-1,3-oxathiane ('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'. That 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 April 2013 (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. For allyl isothiocyanate, the Authority stated that, although additional exposure to that substance through its low use level in animal feeds would not substantially increase consumer exposure, the estimated exposure of consumers is already higher than the acceptable daily intake. For allyl isothiocyanate and 2-methylpropane-1-thiol maximum contents should be set up to ensure consumer safety and environmental protection, respectively. The Authority further concluded that the function of the substances concerned in feed is similar to that on food. The Authority has already concluded that for food the substances concerned are efficacious, as it increases the food smell or palatability. Therefore, that conclusion can be extrapolated for feed. The Authority could not conclude on the safety of the substances concerned used in water for drinking. However, those substances can be used within compound feeds which are subsequently administered via water.

^{(&}lt;sup>1</sup>) OJ L 268, 18.10.2003, p. 29.

^{(&}lt;sup>2</sup>) Council Directive 70/524/EEC of 23 November 1970 concerning additives in feeding-stuffs (OJ L 270, 14.12.1970, p. 1).

^{(&}lt;sup>3</sup>) EFSA Journal 2013;11(5):3208.

- (5) Restrictions and conditions should be provided for to allow better control. For all the substances except allyl isothiocyanate and 2-methylpropane-1-thiol, since safety reasons do not require the setting of a maximum content and, taking into account the re-evaluation performed by the Authority, recommended contents should be indicated on the label of the additive. Where such contents are exceeded, certain information should be indicated on the label of premixtures, compound feeds and feed materials.
- (6) The Authority concluded that the substances concerned are to be considered as being irritant to skin, eyes and respiratory tract and as a skin sensitiser. Consequently, appropriate protective measures should be 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.
- (7) 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.
- (8) 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.
- (9) 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 as 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 as 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.

EN

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 JUNCKER

Identifica-	Name of		Composition, chemical	Species or		Minimum content	Maximum content		End of period
number of the additive	of authoris- ation	Additive	formula, description, analyti- cal method	category of animal	Maximum age	mg of active s complete feed a moisture co	ubstance/kg of dingstuff with ntent of 12 %	Other provisions	of authoris- ation
(1)	(2)	(3)	(4)	(5)	(6)	()	7)	(8)	(9)

ANNEX

Category: Sensory additives. Functional group: Flavouring compounds

2b12001 — 3-(Methylthio) propional-dehyde Additive composition All animal species — — 1. The additive shall be incorporated into the feed in the form of a pre-mixture. 6 February 2027 3-(Methylthio) propional-dehyde Ghenydethio) propional-dehyde Ghenydethio) propional-dehyde 0. In the directions for use of the additive and premixtures, the storage and stability conditions shall be indicated. 6 February 2027 3-(Methylthio) propional-dehyde 3-(Methylthio) propional-dehyde 0. The recommended maximum content of the active substance 0. The recommended maximum content of the active substance shall be indicated. 3-(Methylthio) propional-dehyde Produced by chemical synthesis Purity: min. 98 % 4. On the label of the additive the following shall be indicated: C_H _g OS CAS number 3268-49-3 FLAVIS No 12.001 8. The functional group, the identification number, the name and the added amount of the active substance of complete feedingstiff with a moisture content of 12 %. Os mg/kg ² . S. The functional group, the identification of 3-(methylthio) propional-dehyde in the feed additive substance of the active substance of t
ing premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL. Indefinition of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg.

17.1.2017

EN

(1)	(2)	(3)	(4)	(5)	(6)	()	7)	(8)	(9)	L 13/
								6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		/190 EN
2b12002		Methyl 3- (methylthio) propionate	Additive composition Methyl 3-(methylthio)pro- pionate Characterisation of the active substance Methyl 3-(methylthio)pro- pionate Produced by chemical synthesis Purity: min. 97 % Chemical formula: $C_5H_{10}O_2S$ CAS number 13532-18-8 FLAVIS No 12.002 Method of analysis (¹) For the determination of methyl 3-(methylthio)pro- pionate in the feed addi- tive and in feed flavour- ing premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027	Official Journal of the European Union 17.1.2017

(1)	(2)	(3)	(4)	(5)	(6)	()	7)	(8)	(9)	17.1.
								6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		.2017 EN
2b12004		Allylthiol	Additive composition Allylthiol Characterisation of the active substance Allylthiol Produced by chemical synthesis Purity: min. 75 % (min. 98 % allylthiol + allyl sul- phide + allyl mercaptan) Chemical formula: C ₃ H ₆ S CAS number 870-23-5 FLAVIS No 12.004 Method of analysis (¹) For the determination of allylthiol in the feed addi- tive and in feed flavour- ing premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027	Official Journal of the European Union L 13/191

(1) (2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.	
2b12006 —	Dimethyl sul- fide	Additive composition Dimethyl sulfide Characterisation of the active substance Dimethyl sulfide Produced by chemical synthesis Purity: min. 95 % Chemical formula: C ₂ H ₆ S CAS number 75-18-3 FLAVIS No 12.006 Method of analysis (¹) For the determination of dimethyl sulfide in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	All animal species			 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	()	7)	(8)	(9)	
								6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		
2b12007		Dibutyl sul- fide	Additive composition Dibutyl sulfide Characterisation of the active substance Dibutyl sulfide Produced by chemical synthesis Purity: min. 95 % Chemical formula: C ₈ H ₁₈ S CAS number 544-40-1 FLAVIS No 12.007 Method of analysis (¹) For the determination of dibutyl sulfide in the feed additive and in feed fla- vouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	L 13
								6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		194 EN
2b12008		Diallyl disul- fide	Additive compositionDiallyl disulfideCharacterisation of the activesubstanceDiallyl disulfideProduced by chemicalsynthesisPurity: min. 80 % (min.98 % diallyl disulphide+ allyl sulphide + allylmercaptan)Chemical formula: $C_6H_{10}S_2$ CAS number 2179-57-9FLAVIS No 12.008Method of analysis (1)For the determination ofdiallyl disulfide in thefeed additive and in feedflavouring premixtures:Gas chromatographymass spectrometry withretention time lockingGC-MS-RTL.	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027	Official Journal of the European Union 17.1.2017

L 13/194

(1)	(2)	(3)	(4)	(5)	(6)	(1	7)	(8)	(9)	17.1.
								6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		2017 EN
2b12009		Diallyl trisul- fide	Additive compositionDiallyl trisulfideCharacterisation of the activesubstanceDiallyl trisulfideProduced by chemicalsynthesisPurity: min. 65 %(min.95 % allyl di-, tri-and tetra sulfides)Chemical formula: $C_6H_{10}S_3$ CAS number 2050-87-5FLAVIS No 12.009Method of analysis (1)For the determination ofdiallyl trisulfide in thefeed additive and in feedflavouring premixtures:Gas chromatographymass spectrometry withretention time lockingGC-MS-RTL.	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027	Official Journal of the European Union L 13/195

(1) (2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.	
2b12013 —	Dimethyl tri- sulfide	Additive compositionDimethyl trisulfideCharacterisation of the activesubstanceDimethyl trisulfideProduced by chemicalsynthesisPurity: min. 97 %Chemical formula: C2H6S3CAS number 3658-80-8FLAVIS No 12.013Method of analysis (1)For the determination ofdimethyl trisulfide in thefeed additive and in feedflavouring premixtures:GasGaschromatographymassSpectrometry withretention time lockingGC-MS-RTL.	All animal species			 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 and stability conditions shall be indicated. The recommended maximum content of the active substance shall be: 0,05 mg/kg of complete feedingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: "Recommended maximum content of the active substance of complete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compound feeding-stuffs, if the following content of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(1	7)	(8)	(9)	17.1.
								6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		2017 EN
2b12014		Dipropyl dis- ulfide	Additive composition Dipropyl disulfide Characterisation of the active substance Dipropyl disulfide Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₆ H ₁₄ S ₂ CAS number 629-19-6 FLAVIS No 12.014 Method of analysis (¹) For the determination of dipropyl disulfide in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. 	6 February 2027	Official Journal of the European Union L 13/197

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)	
								6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		
2b12025		Allyl isothio- cyanate	Additive composition Allyl isothiocyanate Characterisation of the active substance Allyl isothiocyanate Produced by chemical synthesis Purity: min. 98 % Chemical formula: C_4H_5NS CAS number 57-06-7 FLAVIS No 12.025 Method of analysis (¹) For the identification of allyl isothiocyanate in the feed additive and flavour- ing premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	All animal species			0,05	 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves. 	6 February 2027	оннов) от не спореат оннов

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2b12026	—	Dimethyl dis- ulfide	Additive composition	All animal species	_		1. The additive shall be incorporated into the feed in the form of a pre- mixture.	6 February 2027
			Dimethyl disulfide				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.	
			substance				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content	
			Produced by chemical				4. On the label of the additive the following shall be indicated:	
			Purity: min. 97 %				'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.	
			Chemical formula: $C_2H_6S_2$				5. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed	
			FLAVIS No 12.026				materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg.	
			Method of analysis (1) For the determination of dimethyl disulfide in the feed additive and in feed				6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eves contact	
			flavouring premixtures: Gas chromatography mass spectrometry with				Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective	
			retention time locking GC-MS-RTL.				equipment, including safety glasses and gloves.	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2b12027		2-Methylben- zene-1-thiol	Additive composition	All animal species	—		1. The additive shall be incorporated into the feed in the form of a pre-mixture.	6 February 2027
			2-Methylbenzene-1-thiol				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.	
			substance				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content	
			Produced by chemical				of 12 %.4. On the label of the additive the following shall be indicated:	
			Purity: min. 95 %				'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.	
			Chemical formula: C ₇ H ₈ S CAS number 137-06-4				 The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- balling of the premivtures food 	
			FLAVIS No 12.027				materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded:	
			Method of analysis (1)				 0,05 mg/kg. 6. For users of the additive and pre- mixtures, feed business operators shall actablish operational procession. 	
			ror the determination of 2-methylbenzene-1-thiol in the feed additive and in feed flavouring premix- tures:				dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum	
			Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.				by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2b12032	_	S-Methyl bu- tanethioate	Additive composition	All animal species	—		1. The additive shall be incorporated into the feed in the form of a pre-mixture.	6 February 2027
			S-Methyl butanethioate				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.	
			substance				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee-	
			S-Metnyl butanetnioate				dingstuff with a moisture content of 12 %.	
			Produced by chemical synthesis				4. On the label of the additive the following shall be indicated:	
			Purity: min. 98 %				'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.	
			Chemical formula: C ₅ H ₁₀ OS				5. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la-	
			CAS number 2432-51-1 FLAVIS No 12.032				belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg.	
			For the determination of S-methyl butanethioate in the feed additive and in feed flavouring premix- tures:				 6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- 	
			Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.				by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.	

(1)	(2) (3) (4) ((5)	(6)	(7)	(8)	(9)		
(1) 2b12037		(3) Allyl methyl disulfide	 (4) Additive composition Allyl methyl disulfide Characterisation of the active substance Allyl methyl disulfide Produced by chemical synthesis Purity: min. 90 % Chemical formula: C₄H₈S₂ CAS number 2179-58-0 FLAVIS No 12.037 Method of analysis (1) For the determination of allyl methyl disulfide in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL. 	(5) All animal species			 (8) 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: 0,05 mg/kg of complete feedingstuff with a moisture content of 12 %. 4. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of complete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. 5. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compound feedingstuffs, if the following content of the active substance in complete feedingstuff with a moisture content of 12 % is exceeded: 0,05 mg/kg. 6. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by 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 safety glasses and gloves. 	(9) 6 February 2027	L 13/202 EN Official Journal of the European Union 17.1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2b12062	—	3-(Methylthio) propan-1-ol	Additive composition	All animal species	—		1. The additive shall be incorporated into the feed in the form of a pre-mixture.	6 February 2027
			3-(Methylthio)propan-1-ol Characterisation of the active				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.	
			substance 3-(Methylthio)propan-1-ol				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content	
			Produced by chemical synthesis				of 12 %.4. On the label of the additive the following shall be indicated:	
			Purity: min. 98 %				'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.	
			Chemical formula: $C_4H_{10}OS$ CAS number 505-10-2				5. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding-	
			FLAVIS No 12.062				stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg.	
			For the determination of 3-(methylthio)propan-1-ol in the feed additive and in feed flavouring premix- tures:				6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures	
			Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.				the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2b12063	_	3-(Methylthio) hexan-1-ol	Additive composition	All animal species	_		1. The additive shall be incorporated into the feed in the form of a pre- mixture.	6 February 2027
			3-(Methylthio)hexan-1-ol				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.	
			substance				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee-	
			Produced by chemical				dingstuff with a moisture content of 12 %.4. On the label of the additive the	
			synthesis				following shall be indicated: 'Recommended maximum content	
			Purity: min. 97 %				of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.	
			Chemical formula: C ₇ H ₁₆ OS				 The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- 	
			CAS number 51755-66-9 FLAVIS No 12.063				belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0.05 mg/kg	
			Method of analysis (1) For the determination of 3-(methylthio)hexan-1-ol in the feed additive and in feed flavouring premix-				 6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. 	
			tures: Gas chromatography mass spectrometry with retention time locking				Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses	
			Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.				mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	17.1.
2b12071	_	1-Propane-1- thiol	Additive composition	All animal species	_		1. The additive shall be incorporated into the feed in the form of a pre-mixture.	6 February 2027	.2017
			1-Propane-1-thiol				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.		EN
			substance				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content		
			Produced by chemical				of 12 %.4. On the label of the additive the following shall be indicated:		
			synthesis Purity: min. 97 %				'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.		Official Jourr
			Chemical formula: C ₃ H ₈ S				5. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la-		nal of the Eu
			CAS number 107-03-9 FLAVIS No 12.071				belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg.		rropean Union
			Method of analysis (1)				6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce-		
			For the determination of 1-propane-1-thiol in the feed additive and in feed flavouring premixtures:				dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures		
			Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.				the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves.		L 13/
									205

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	L 13/
2b12088	_	Diallyl sulfide	Additive composition	All animal species			1. The additive shall be incorporated into the feed in the form of a pre- mixture.	6 February 2027	206
			Diallyl sulfide				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.		EN
			Characterisation of the active substance				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content		
			Diallyl sulfide				difigstult with a moisture content of 12 %.4. On the label of the additive the		
			Produced by chemical synthesis				following shall be indicated: 'Recommended maximum content		Offic
			Purity: min. 97 %				of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.		cial Journ
			Chemical formula: C ₆ H ₁₀ S				 The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- 		al of the Et
			CAS number 592-88-1				belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete		ıropean Uı
			FLAVIS No 12.088				feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg.		nion
			Method of analysis (1)				6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce-		
			For the determination of diallyl sulfide in the feed additive and in feed fla- vouring premixtures:				dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum		
			Gas chromatography mass spectrometry with retention time locking				by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses		17.
			GC-MS-RTL.				and gloves.		1.2017

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	17.1.
2b12118	_	2,4-Dithia- pentane	Additive composition	All animal species	_		1. The additive shall be incorporated into the feed in the form of a pre-mixture.	6 February 2027	.2017
			2,4-Dithiapentane				2. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated.		EN
			Characterisation of the active substance				3. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content		
			2,4-Dithiapentane				of 12 %. 4. On the label of the additive the		
			Produced by chemical synthesis				following shall be indicated: 'Recommended maximum content of the active substance of com-		Official
			Purity: min. 99 %				plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'.		Journal
			Chemical formula: C ₃ H ₈ S ₂				5. The runctional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la-		l of the Eu
			CAS number 1618-26-4				belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete		ropean Ui
			FLAVIS No 12.118				feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg.		nion
			Method of analysis (1)				6. For users of the additive and pre- mixtures, feed business operators shall establish operational proce-		
			For the determination of 2,4-dithiapentane in the feed additive and in feed flavouring premixtures:				dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum		
			Gas chromatography mass spectrometry with retention time locking GC-MS-RTI				by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves		L 1
			GC-WIS-KTL.				מווע צוטירה.		3/207

(1)	(1) (2)		(4)	(5)	(6)	(7)	(8)	(9)
2b12168		2-Methyl-2- (methyldithio) propanal	Additive composition2-Methyl-2-(methyldithio) propanalCharacterisation of the active substance2-Methyl-2-(methyldithio) propanalProduced by chemical synthesisPurity: min. 95 %Chemical formula: $C_5H_{10}OS_2$ CAS number 67952-60-7FLAVIS No 12.168Method of analysis (1)For the determination of 2-methyl-2-(methyldithio) 	All animal species			 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of com- plete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identifi- cation number, the name and the added amount of the active sub- stance shall be indicated on the la- belling of the premixtures, feed materials and compound feeding- stuffs, if the following content of the active substance in complete feedingstuff with a moisture con- tent of 12 % is exceeded: 0,05 mg/kg. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves. 	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2b12173		2-Methylpropane-1-thiol	Additive composition 2-Methylpropane-1-thiol Characterisation of the active substance 2-Methylpropane-1-thiol Produced by chemical synthesis Purity: min. 97 % Chemical formula: C ₄ H ₁₀ S CAS number 513-44-0 FLAVIS No 12.173 Method of analysis (¹) For the identification of 2-methylpropane-1-thiol in the feed additive and flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.	All animal species		— 0,04	 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. For users of the additive and pre- mixtures, feed business operators shall establish operational proce- dures and organisational measures to address potential risks by der- mal contact or eyes contact. Where those risks cannot be elim- inated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including safety glasses and gloves. 	6 February 2027
2b12175		Methylsulfinyl methane	Additive compositionMethylsulfinylmethaneCharacterisation of the activesubstanceMethylsulfinylmethaneProduced by chemicalsynthesisPurity: min. 99 %Chemical formula: C_2H_6OS CAS number 67-68-5FLAVIS No 12.175	All animal species			 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. The recommended maximum con- tent of the active substance shall be: 0,05 mg/kg of complete fee- dingstuff with a moisture content of 12 %. 	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Method of analysis (¹) For the determination of methylsulfinylmethane in the feed additive and in feed flavouring premix- tures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.					 On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of complete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compound feedingstuffs, if the following content of the active substance in complete feedingstuff with a moisture content of 12 % is exceeded: 0,05 mg/kg. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by 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 safety glasses and gloves. 	
2b12197		Propane-2- thiol	Additive composition Propane-2-thiol Characterisation of the active substance Propane-2-thiol Produced by chemical synthesis Purity: min. 98 %	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. 	6 February 2027

(1)	(2)	(3)	(4)	(5)	(6)	(7	7)	(8)	(9)	17.1.
			Chemical formula: C ₃ H ₈ S CAS number 75-33-2 FLAVIS No 12.197 <i>Method of analysis</i> (¹) For the determination of propane-2-thiol in the feed additive and in feed flavouring premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.					 The recommended maximum content of the active substance shall be: 0,05 mg/kg of complete feedingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: 'Recommended maximum content of the active substance of complete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compound feedingstuffs, if the following content of the active substance in complete feedingstuff with a moisture content of 12 % is exceeded: 0,05 mg/kg. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by 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 safety glasses and gloves. 		2017 EN Official Journal of the European Union
2b15025		3,5-Dimethyl- 1,2,4-trithio- lane	Additive composition 3,5-Dimethyl-1,2,4- trithiolane	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. 	6 February 2027	L 13/211

(1)	(2)	(3)	(4)	(5)	(6)	(7	7)	(8)	(9)
			Characterisation of the active substance 3,5-Dimethyl-1,2,4- trithiolane Produced by chemical synthesis Purity: min. 90 % Secondary components: diethyl trisulphide, di- methylbenzylcarbinol, N, N-dimethyl-ethanethioa- mide, 4,6-di- methyl1,2,3,5-tetracyclo- hexane, 3-methyl-1,2,4- trithiolane, 2-methyl-4- propyl 1,3-oxathiane Chemical formula: $C_4H_8S_3$ CAS number 23654-92-4 FLAVIS No 15.025 <i>Method of analysis</i> (¹) For the determination of 3,5-dimethyl-1,2,4- trithiolane in the feed ad- ditive and in feed flavour- ing premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.					 The recommended maximum content of the active substance shall be: 0,05 mg/kg of complete feedingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: Recommended maximum content of the active substance of complete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compound feedingstuffs, if the following content of the active substance in complete feedingstuff with a moisture content of 12 % is exceeded: 0,05 mg/kg. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by 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 safety glasses and gloves. 	
2b16030	_	2-Methyl-4- propyl-1,3-ox- athiane	Additive composition 2-Methyl-4-propyl-1,3-ox- athiane	All animal species				 The additive shall be incorporated into the feed in the form of a pre- mixture. In the directions for use of the ad- ditive and premixtures, the storage and stability conditions shall be indicated. 	6 February 2027

(1)	(2) (3)	(4)	(5)	(6)	(7)	(8)	(9)
		Characterisation of the active substance 2-Methyl-4-propyl-1,3-ox- athiane Produced by chemical synthesis Purity: min. 98 % Chemical formula: C ₈ H ₁₆ OS CAS number 67715-80-4 FLAVIS No 16.030 <i>Method of analysis</i> (¹) For the determination of 2-methyl-4-propyl-1,3-ox- athiane in the feed addi- tive and in feed flavour- ing premixtures: Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.				 The recommended maximum content of the active substance shall be: 0,05 mg/kg of complete feedingstuff with a moisture content of 12 %. On the label of the additive the following shall be indicated: Recommended maximum content of the active substance of complete feedingstuff with a moisture content of 12 %: 0,05 mg/kg'. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the labelling of the premixtures, feed materials and compound feeding-stuffs, if the following content of the active substance in complete feedingstuff with a moisture content of 12 % is exceeded: 0,05 mg/kg. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by 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 safety glasses and gloves. 	

(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

L 13/213