2025/157

30.1.2025

COMMISSION IMPLEMENTING REGULATION (EU) 2025/157

of 29 January 2025

concerning the authorisation of microcrystalline cellulose, methyl cellulose, ethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose as feed additives for all animal species

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EC) No 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition (1), and in particular Article 9(2) thereof,

Whereas:

- (1) Regulation (EC) No 1831/2003 provides for the authorisation of additives for use in animal nutrition and for the grounds and procedures for granting such an authorisation. Article 10(2) of that Regulation provides for the re-evaluation of additives authorised pursuant to Council Directive 70/524/EEC (2).
- (2) The substances microcrystalline cellulose, methyl cellulose, ethyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose were authorised without a time limit pursuant to Directive 70/524/EEC as feed additives for all animal species. Those substances were subsequently entered in the Register of Feed Additives as existing products, in accordance with Article 10(1), point (b), of Regulation (EC) No 1831/2003.
- (3) In accordance with Article 10(2) of Regulation (EC) No 1831/2003 in conjunction with Article 7 thereof, applications were submitted for the re-evaluation of microcrystalline cellulose, methyl cellulose, ethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose as feed additives for all animal species. The applicants requested microcrystalline cellulose, methyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose to be classified in the additive category 'technological additives' and in the functional groups 'emulsifiers', 'stabilisers', 'thickeners' and 'gelling agents'; ethyl cellulose in the additive category 'technological additives' and in the functional group 'stabilisers', 'stabilisers', 'thickeners' and 'gelling agents'. The applications were accompanied by the particulars and documents required under Article 7(3) of Regulation (EC) No 1831/2003.
- (4) In addition, in accordance with Article 7 of Regulation (EC) No 1831/2003, applications were submitted for the authorisation of microcrystalline cellulose, methyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose as feed additives for all animal species, requesting them to be classified in the additive category 'technological additives' and in the functional group 'binders'. Those applications were accompanied by the particulars and documents required under Article 7(3) of Regulation (EC) No 1831/2003.

⁽¹⁾ OJ L 268, 18.10.2003, p. 29, ELI: https://eur-lex.europa.eu/eli/reg/2003/1831/oj.

⁽²⁾ Council Directive 70/524/EEC of 23 November 1970 concerning additives in feedingstuffs (OJ L 270, 14.12.1970, p. 1, ELI: http://data.europa.eu/eli/dir/1970/524/oj).

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(5) The European Food Safety Authority ('the Authority') concluded in its opinions of 2 July 2020 (3) and 31 January 2024 (4) that, under the proposed conditions of use, microcrystalline cellulose, methyl cellulose, ethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose, are safe for all animal species, the consumer and the environment. In the absence of data, it was not in the position to conclude on the safety for the user. No specific data on the efficacy of these additives in feedingstuffs were provided, but as they are all authorised for use as food additives, the Authority concluded that the effect seen when those substances are used in food could reasonably be expected to be seen when they are used as additives in feed. It also verified the reports on the method of analysis of the feed additives in feed submitted by the Reference Laboratory set up by Regulation (EC) No 1831/2003.

- (6) In view of the above, the Commission considers that microcrystalline cellulose, methyl cellulose, ethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose satisfy the conditions provided for in Article 5 of Regulation (EC) No 1831/2003. Accordingly, the use of those substances should be authorised. In addition, the Commission considers that appropriate protective measures should be taken to prevent adverse effects on the health of the users of the additives.
- (7) Since safety reasons do not require the immediate application of the modifications to the conditions of authorisation of the substances concerned, as far as they belong to the functional groups 'emulsifiers', 'stabilisers', 'thickeners' and 'gelling agents', it is appropriate to provide for 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 'technological additives' and the functional groups 'emulsifiers', 'stabilisers', 'thickeners', 'gelling agents' or 'binders', are authorised as additives in animal nutrition, subject to the conditions laid down in that Annex.

Article 2

Transitional measures

- 1. The feed additives microcrystalline cellulose, methyl cellulose, ethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methyl cellulose and sodium carboxymethyl cellulose, as authorised pursuant to Directive 70/524/EEC and premixtures containing these additives, which are produced and labelled before 19 August 2025 in accordance with the rules applicable before 19 February 2025 may continue to be placed on the market and used until the stocks concerned are exhausted.
- 2. Compound feed and feed materials containing the feed additives referred to in paragraph 1, which are produced and labelled before 19 February 2026 in accordance with the rules applicable before 19 February 2025 may continue to be placed on the market and used until the stocks concerned are exhausted if they are intended for food-producing animals.

^(*) EFSA Journal 2020;18(7):6209; EFSA Journal 2020;18(7):6212; EFSA Journal 2020;18(7):6210; EFSA Journal 2020;18(7):6213; EFSA Journal 2020;18(7):6234; EFSA Journal 2020;18(7):6211.

⁽⁴⁾ EFSA Journal 2024;22:e8625; EFSA Journal 2024;22:e8637; EFSA Journal 2024;22:e8636; EFSA Journal 2024;22:e8626.

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3. Compound feed and feed materials containing the feed additives referred to in paragraph 1, which are produced and labelled before 19 February 2027 in accordance with the rules applicable before 19 February 2025 may continue to be placed on the market and used until the stocks concerned 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, 29 January 2025.

For the Commission
The President
Ursula VON DER LEYEN

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Identifica- tion number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content mg of additiv feedingstuff	Maximum content ye/kg of complete with a moisture	Other provisions	End of period of authorisation
						nt of 12 %		
Category: to	echnological additiv	ves. Functional group: emulsifiers						
1c460i	Microcrystalline cellulose	Additive composition Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis) Solid form	All animal species	-	-	-	1. In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated.	19 February 2035
		Characterisation of the active substance Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis), manufactured from wood pulp partially depolymerised with a hydrolysation process obtained with heat and mineral acid					2. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use.	
		CAS No: 9004-34-6 Loss on drying: ≤ 7 %					Where those risks cannot be eliminated by such procedures and measures,	
		Water-soluble matters: ≤ 0,24 %					the additive and premixtures shall be used with personal	
		Sulfated ash: ≤ 0,5 %					skin, eye and breathing	
		Starch: not detectable					protective equipment.	
		Carboxyl groups ≤ 1 %						
		Particle size: ≤ 10 % of particles of less than 5 µm						

Identifica- tion number		Commercial Commercial Association	Species or	Maximum -	Minimum content	Maximum content		End of period of
of the feed additive	Additive	Composition, chemical formula, description, analytical method	category of animal	age	feedingstuff	re/kg of complete with a moisture nt of 12 %	ith a moisture	
		Analytical method (¹) For the identification/characterisation of microcrystalline cellulose in the feed additive: — Commission Regulation (EU) No 231/2012 (²) for microcrystalline cellulose and the corresponding methods of the FAO JECFA 'microcrystalline cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications						

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

^(*) Commission Regulation (EU) No 231/2012 of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council (OJ L 83, 22.3.2012, p. 1, ELI: http://data.europa.eu/eli/reg/2012/231/oj).

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Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	analytical method	category of animal	age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions	authorisation
Category: t	echnological additiv	es. Functional group: stabilisers						
1c460i	Microcrystalline cellulose	Additive composition Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis) Solid form Characterisation of the active substance Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis), manufactured from wood pulp partially depolymerised with a hydrolysation process obtained with heat and mineral acid CAS No: 9004-34-6 Loss on drying: ≤ 7 % Water-soluble matters: ≤ 0,24 % Sulfated ash: ≤ 0,5 % Carboxyl groups ≤ 1 % Particle size: ≤ 10 % of particles of less than 5 μm Analytical method (¹) For the identification/characterisation of microcrystalline cellulose in the feed additive: — Regulation (EU) No 231/2012 for microcrystalline cellulose and the corresponding methods of the FAO	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

Identifica- tion		Composition chamical formula description	Species or	Maximum - age	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	category of animal		mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
		JECFA 'microcrystalline cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications						
	ion-reports_en.	ods are available at the following address of	the Reference	Laboratory. III			cu/cui-ia-cuii-iccu-audiuves/cuii-ia-audi	ionsation/curi-ia-
Identifica- tion			Minimum Maximum Content Content					
number of	Additive	Composition chemical formula description	Species or	Maximum	content	content		End of period of
the feed additive		Composition, chemical formula, description, analytical method	category of animal	Maximum age	content mg of additiv feedingstuff		Other provisions	End of period of authorisation
additive	technological additiv		category		content mg of additiv feedingstuff	content re/kg of complete with a moisture	Other provisions	End of period of authorisation

indicated.

2. For users of the additive and

premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks

Solid form

Characterisation of the active substance

Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis), manufactured from wood pulp partially depolymerised with a hydrolysation process obtained with

Identifica- tion			Species or		Minimum content	Maximum content		End of period of authorisation
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	category of animal	Maximum age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions	
		heat and mineral acid CAS No: 9004-34-6 Loss on drying: ≤ 7 % Water-soluble matters: ≤ 0,24 % Sulfated ash: ≤ 0,5 % Carboxyl groups ≤ 1 % Particle size: ≤ 10 % of particles of less than 5 µm Analytical method (¹) For the identification/characterisation of microcrystalline cellulose in the feed additive: — Regulation (EU) No 231/2012 for microcrystalline cellulose and the corresponding methods of the FAO JECFA 'microcrystalline cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications					resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	analytical method	category of animal	age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions	authorisation
Category: t	echnological additiv	es. Functional group: gelling agents						
1c460i	Microcrystalline cellulose	Additive composition Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis) Solid form Characterisation of the active substance Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis), manufactured from wood pulp partially depolymerised with a hydrolysation process obtained with heat and mineral acid CAS No: 9004-34-6 Loss on drying: ≤ 7 % Water-soluble matters: ≤ 0,24 % Sulfated ash: ≤ 0,5 % Carboxyl groups ≤ 1 % Particle size: ≤ 10 % of particles of less than 5 μm Analytical method (¹) For the identification/characterisation of microcrystalline cellulose in the feed additive: — Regulation (EU) No 231/2012 for microcrystalline cellulose and the corresponding methods of the FAO	All animal species		-		 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

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Identifica- tion	tion	S I . If I I S	Species or	Mariana	Minimum content	Maximum content		Full of month of all
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	description, Species or category of animal Maximum age		mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		JECFA 'microcrystalline cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications						
	of the analytical metho on-reports_en.	ds are available at the following address of	the Reference	Laboratory: ht	ttps://joint-resear	rch-centre.ec.europa.	eu/eurl-fa-eurl-feed-additives/eurl-fa-au	thorisation/eurl-fa

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content			End of period of
number of the feed additive	Additive	analytical method	category of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions		authorisation
Category:	technological additiv	res. Functional group: binders							
1c460i	Microcrystalline cellulose	Additive composition Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis) Solid form	All animal species	-	-	-		In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated.	19 February 2035
		Characterisation of the active substance Microcrystalline cellulose ≥ 97 % (calculated as cellulose on the anhydrous basis), manufactured from wood pulp					2.	For users of the additive and premixtures, feed business operators shall establish operational procedures and	

Identifica- tion			Species or		Minimum content	Maximum content		F 1 6 · 1 6
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	category of animal	Maximum age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		partially depolymerised with a hydrolysation process obtained with heat and mineral acid CAS No: 9004-34-6 Loss on drying: ≤ 7 % Water-soluble matters: ≤ 0,24 % Sulfated ash: ≤ 0,5 % Carboxyl groups ≤ 1 % Particle size: ≤ 10 % of particles of less than 5 µm Analytical method (¹) For the identification/characterisation of microcrystalline cellulose in the feed additive: — Regulation (EU) No 231/2012 for microcrystalline cellulose and the corresponding methods of the FAO JECFA 'microcrystalline cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications					organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

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Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content			End of period of
number of the feed additive	Additive	analytical method	category of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %			Other provisions	authorisation
Category: t	technological additiv	ves. Functional group: emulsifiers					•		
1c461	Methyl cellulose	Additive composition Methyl cellulose Solid form Characterisation of the active substance Methyl cellulose obtained from wood pulp or cotton by treatment with alkali and methylation of the alkali cellulose with methyl chloride CAS No: 9004-67-5 Content not less than 25 % and not more than 33 % of methoxyl groups (-OCH₃) and not more than 5 % of hydroxyethoxyl groups (-OCH₂CH₂OH) Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % Analytical method (¹) For the identification/characterisation of methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for methyl cellulose and the corresponding methods of the FAO JECFA 'Methyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for	All animal species	-	-	-	2.	In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	19 February 2035

Identifica- tion	Additive	analytical method	Species or category of animal	Maximum – age	Minimum content	Maximum content		F 1 6 · 1 6
number of the feed additive					mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		food additives specifications and the European Pharmacopoeia monograph 0345						
	of the analytical metho on-reports_en.	ods are available at the following address of	the Reference	Laboratory: ht	tps://joint-resear	rch-centre.ec.europa.	eu/eurl-fa-eurl-feed-additives/eurl-fa-au	uthorisation/eurl-fa-
Identifica-			Species or		Minimum content	Maximum content		

Identification number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	feedingstuff	Maximum content ve/kg of complete with a moisture nt of 12 %	Other provisions	End of period of authorisation
Category:	technological additiv	es. Functional group: stabilisers		•	•			-
1c461	Methyl cellulose	Additive composition Methyl cellulose Solid form Characterisation of the active substance Methyl cellulose obtained from wood pulp or cotton by treatment with alkali and methylation of the alkali cellulose with methyl chloride CAS No: 9004-67-5 Content not less than 25 % and not more than 33 % of methoxyl groups (-OCH ₃)	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be 	19 February 2035

Identifica-			Species or	Maximum - age	Minimum content	Maximum content		End of noviod of
number of the feed additive	Additive	analytical method	category of animal		mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		and not more than 5 % of hydroxyethoxyl groups (-OCH ₂ CH ₂ OH) Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % Analytical method (¹) For the identification/characterisation of methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for methyl cellulose and the corresponding methods of the FAO JECFA 'Methyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopoeia monograph 0345					eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content	Other provisions End of period
number of the feed additive	Additive	analytical method	category of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions End of period authorisatio
Category:	technological additiv	es. Functional group: thickeners					
1c461	Methyl cellulose	Additive composition Methyl cellulose Solid form Characterisation of the active substance Methyl cellulose obtained from wood pulp or cotton by treatment with alkali and methylation of the alkali cellulose with methyl chloride CAS No: 9004-67-5 Content not less than 25 % and not more than 33 % of methoxyl groups (-OCH₃) and not more than 5 % of hydroxyethoxyl groups (-OCH₂CH₂OH) Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % Analytical method (¹) For the identification/characterisation of methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for methyl cellulose and the corresponding methods of the FAO JECFA 'Methyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.

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Identifica- tion	Additive	analytical method	Species or category of animal		Minimum content	Maximum content		
number of the feed additive				Maximum age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		food additives specifications and the European Pharmacopoeia monograph 0345						
	of the analytical metho on-reports_en.	ods are available at the following address of	the Reference	Laboratory: ht	ttps://joint-resear	rch-centre.ec.europa.	.eu/eurl-fa-eurl-feed-additives/eurl-fa-a	uthorisation/eurl-fa-
Identifica- tion	Additive	Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of

Identifica- tion	tion	Composition, chemical formula, description,	Species or category of animal	Maximum - age	content	content		End of period of
number of the feed additive	Additive				mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
Category:	technological additiv	es. Functional group: gelling agents						
1c461	Methyl cellulose	Additive composition Methyl cellulose Solid form Characterisation of the active substance Methyl cellulose obtained from wood pulp or cotton by treatment with alkali and methylation of the alkali cellulose with methyl chloride CAS No: 9004-67-5	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks 	19 February 2035

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum -	Minimum content	Maximum content	Other provisions	End of period of authorisation
number of the feed additive	Additive	analytical method	category of animal	age	feedingstuff	re/kg of complete with a moisture nt of 12 %		
		Content not less than 25 % and not more than 33 % of methoxyl groups (-OCH ₃) and not more than 5 % of hydroxyethoxyl groups (-OCH ₂ CH ₂ OH) Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % Analytical method (¹) For the identification/characterisation of methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for methyl cellulose and the corresponding methods of the FAO JECFA 'Methyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopoeia monograph 0345					resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

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Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content	End	d of period of
number of the feed additive	Additive	analytical method	category of animal	age	feedingstuff	we/kg of complete with a moisture nt of 12 %		authorisation
Category:	technological additiv	ves. Functional group: binders						
1c461	Methyl cellulose	Additive composition Methyl cellulose Solid form Characterisation of the active substance Methyl cellulose obtained from wood pulp or cotton by treatment with alkali and methylation of the alkali cellulose with methyl chloride CAS No: 9004-67-5 Content not less than 25 % and not more than 33 % of methoxyl groups (-OCH₃) and not more than 5 % of hydroxyethoxyl groups (-OCH₂CH₂OH) Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % Analytical method (¹) For the identification/characterisation of methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for methyl cellulose and the corresponding methods of the FAO JECFA 'Methyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for	All animal species	-	-		 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	Pebruary 035

Identification number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	feedingstuff	Maximum content ye/kg of complete with a moisture nt of 12 %		Other provisions	End of period of authorisation
Category:	technological additiv	es. Functional group: stabilisers		·	·				
1d462	Ethyl cellulose	Additive composition Ethyl cellulose Solid form Characterisation of the active substance Ethyl cellulose, obtained by reaction of partially depolymerised cellulose with ethyl chloride Ethoxyl groups (-OC ₂ H ₅): > 44 % and < 50 % on the dried basis (equivalent to not more than 2,6 ethoxyl groups per	All animal species	-	-	-	th pr co to in 2. Fo pr op or ad	the directions for use of the additive and remixtures, the storage conditions and the stability to heat treatment shall be addicated. For users of the additive and remixtures, feed business perators shall establish perational procedures and reganisational measures to didress potential risks establing from their use.	19 February 2035

Identification number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	feedingstuff	Maximum content ye/kg of complete with a moisture nt of 12 %	Other provisions	End of period of authorisation
		anhydroglucose unit) CAS No: 9004-57-3 Loss on drying: ≤ 3% Sulfated ash: ≤ 0,4 % Analytical method (¹) For the identification/characterisation of ethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for ethyl cellulose and the corresponding methods described in the FAO JECFA 'Ethyl cellulose' monograph and the European Pharmacopoeia monograph 0822					Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

Identifica- tion		Composition, chemical formula, description,	Species or	Manimum	Minimum Maximum content content		End of noniod of	
number of the feed additive	Additive	analytical method	category of animal	Maximum age	feedingstuff w	kg of complete with a moisture of 12 %	Other provisions	End of period of authorisation
Category:	technological additiv	res. Functional group: emulsifiers						_
1c463	Hydroxypropyl cellulose	Additive composition Hydroxypropyl cellulose Solid form Characterisation of the active substance Hydroxypropyl cellulose, obtained by partial etherification of cellulose from fibrous plant material with hydroxypropyl groups Hydroxypropoxyl groups (-OCH₂CHOHCH₃): ≤ 80,5 % equivalent to not more than 4,6 hydroxypropyl groups per anhydroglucose unit on the anhydrous basis CAS No: 9004-64-2 Loss on drying: ≤ 10 % Sulfated ash: ≤ 0,5 % Propylene chlorohydrins ≤ 0,1 mg/kg Analytical method (¹) For the identification/characterisation of hydroxypropyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for hydroxypropyl cellulose and the corresponding methods of FAO JECFA 'hydroxypropyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for	All animal species				 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

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Identifica- tion			Species or	Marrimanna	Minimum content	Maximum content		Fud - Curvic d - C
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	category of animal	Maximum age	feedingstuff w	kg of complete rith a moisture of 12 %	Other provisions	End of period o authorisation
		food additives specifications and the European Pharmacopeia monograph 0337						
	of the analytical metho on-reports_en.	ds are available at the following address of th	e Reference Lal	poratory: https:	//joint-research-o	centre.ec.europa.	eu/eurl-fa-eurl-feed-additives/eurl-fa-au	thorisation/eurl-fa
Identifica- tion	. 11::	Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period o

End of period of authorisation Other provisions number of Additive category of mg of additive/kg of complete analytical method age the feed animal feedingstuff with a moisture additive content of 12 % Category: technological additives. Functional group: stabilisers Hydroxypropyl cellulose Additive composition In the directions for use of 19 February 1c463 All animal species the additive and 2035 Hydroxypropyl cellulose premixtures, the storage Solid form conditions and the stability to heat treatment shall be Characterisation of the active substance indicated. Hydroxypropyl cellulose, obtained by partial etherification of cellulose from For users of the additive and premixtures, feed business fibrous plant material with hydroxypropyl operators shall establish groups operational procedures and Hydroxypropoxyl groups organisational measures to (-OCH₂CHOHCH₃): \leq 80,5 % equivalent to not more than 4,6 hydroxypropyl groups address potential risks resulting from their use. Where those risks cannot be

Identifica- tion			Species or		Minimum Maximum content content		End of period of authorisation	
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	category of animal	Maximum age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %			Other provisions
		per anhydroglucose unit on the anhydrous basis CAS No: 9004-64-2 Loss on drying: ≤ 10 % Sulfated ash: ≤ 0,5 % Propylene chlorohydrins ≤ 0,1 mg/kg Analytical method (¹) For the identification/characterisation of hydroxypropyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for hydroxypropyl cellulose and the corresponding methods of FAO JECFA 'hydroxypropyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopeia monograph 0337					eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

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Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	ditive analytical method	category of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
Category:	technological additiv	ves. Functional group: thickeners						_
1c463	Hydroxypropyl cellulose	Additive composition Hydroxypropyl cellulose Solid form Characterisation of the active substance Hydroxypropyl cellulose, obtained by partial etherification of cellulose from fibrous plant material with hydroxypropyl groups Hydroxypropoxyl groups (-OCH₂CHOHCH₃): ≤ 80,5 % equivalent to not more than 4,6 hydroxypropyl groups per anhydroglucose unit on the anhydrous basis CAS No: 9004-64-2 Loss on drying: ≤ 10 % Sulfated ash: ≤ 0,5 % Propylene chlorohydrins ≤ 0,1 mg/kg Analytical method (¹) For the identification/characterisation of hydroxypropyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for hydroxypropyl cellulose and the corresponding methods of FAO JECFA 'hydroxypropyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for	All animal species				 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

Identifica- tion			Species or	Marianan	Minimum content	Maximum content		7.16.116
number of the feed additive	Additive	Composition, chemical formula, description, analytical method Composition, chemical formula, description, category of animal Maximum age			mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		food additives specifications and the European Pharmacopeia monograph 0337						
	of the analytical metho on-reports_en.	ods are available at the following address of th	e Reference La	boratory: https:	//joint-research-o	centre.ec.europa.	eu/eurl-fa-eurl-feed-additives/eurl-fa-au	thorisation/eurl-fa
Identifica- tion		Composition showing formula description	Species or	Marianan	Minimum content	Maximum content		End of noniced of
number of the feed	Additive	Composition, chemical formula, description, analytical method	category of animal	Maximum age		kg of complete	Other provisions	End of period of authorisation

feedingstuff with a moisture additive content of 12 % Category: technological additives. Functional group: gelling agents Hydroxypropyl cellulose Additive composition In the directions for use of 19 February 1c463 All animal species the additive and 2035 Hydroxypropyl cellulose premixtures, the storage Solid form conditions and the stability to heat treatment shall be Characterisation of the active substance indicated. Hydroxypropyl cellulose, obtained by For users of the additive and partial etherification of cellulose from premixtures, feed business fibrous plant material with hydroxypropyl operators shall establish groups operational procedures and Hydroxypropoxyl groups organisational measures to (-OCH₂CHOHCH₃): \leq 80,5 % equivalent to not more than 4,6 hydroxypropyl groups address potential risks resulting from their use. Where those risks cannot be

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content mg of additive/kg of complete feedingstuff with a moisture content of 12 %			End of period of authorisation
number of the feed additive	Additive	analytical method	category of animal	age			Other provisions	
		per anhydroglucose unit on the anhydrous basis					eliminated by such procedures and measures,	
		CAS No: 9004-64-2					the additive and premixtures shall be used with personal skin, eye and breathing	
		Loss on drying: ≤ 10 %						
		Sulfated ash: ≤ 0,5 %			protective equip	protective equipment.		
		Propylene chlorohydrins ≤ 0,1 mg/kg						
		Analytical method (¹)						
		For the identification/characterisation of hydroxypropyl cellulose in the feed additive:						
		 Regulation (EU) No 231/2012 for hydroxypropyl cellulose and the corresponding methods of FAO JECFA 'hydroxypropyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopeia monograph 0337 						

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

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Identifica- tion			Species or		Minimum content	Maximum content		
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	category	Maximum age	of age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions End of period authorisatio
Category: t	echnological additiv	es. Functional group: emulsifiers						
1c464	Hydroxypropyl methyl cellulose	Additive composition Hydroxypropyl methyl cellulose Solid form Characterisation of the active substance Hydroxypropyl methyl cellulose manufactured reacting partially depolymerised cellulose with methyl groups and containing a small degree of hydroxypropyl substitution CAS No: 9004-65-3 Methoxyl groups: (-OCH₃) 19-30 % Hydroxypropoxyl groups (-OCH₂CHOHCH₃): 3-12 % Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % (for products with viscosity of 50 mPa.s or above); ≤ 3 % (for products with viscosity below 50 mPa.s) Propylene chlorohydrins: ≤ 0,1 mg/kg Analytical method (¹) For the identification/characterisation of hydroxypropyl methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for hydroxypropyl methyl cellulose and the corresponding methods of the FAO JECFA 'Hydroxypropyl methyl	All animal species	-			 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	

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Identifica- tion	Additive	Composition, chemical formula, description,	Species or category of animal	Marina	Minimum content	Maximum content		Full of march of
number of the feed additive				Maximum age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopoeia monograph 0348						

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

Identification number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or cate- gory of animal	Maximum age	feedingstuff	Maximum content re/kg of complete with a moisture nt of 12 %	Other provisions	End of period of authorisation
Category:	ı technological additiv	es. Functional group: stabilisers		<u> </u>				
1c464	Hydroxypropyl methyl cellulose	Additive composition Hydroxypropyl methyl cellulose Solid form Characterisation of the active substance Hydroxypropyl methyl cellulose manufactured reacting partially depolymerised cellulose with methyl	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business 	19 February 2035

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

Identifica- tion		Comparison described Comparison described	Species or	Mariana	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	Composition, chemical formula, description, analytical method	cate- gory of animal	Maximum age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
Category: t	technological additiv	ves. Functional group: thickeners						
1c464	Hydroxypropyl methyl cellulose	Additive composition Hydroxypropyl methyl cellulose Solid form Characterisation of the active substance Hydroxypropyl methyl cellulose manufactured reacting partially depolymerised cellulose with methyl groups and containing a small degree of hydroxypropyl substitution CAS No: 9004-65-3 Methoxyl groups (-OCH₃): 19-30 % Hydroxypropoxyl groups (-OCH₂CHOHCH₃): 3-12 % Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % (for products with viscosity of 50 mPa.s or above); ≤ 3 % (for products with viscosity below 50 mPa.s) Propylene chlorohydrins: ≤ 0,1 mg/kg Analytical method (¹) For the identification/characterisation of hydroxypropyl methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for hydroxypropyl methyl cellulose and the corresponding methods of the FAO JECFA 'Hydroxypropyl methyl	All animal species	-	-		 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

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Identification number of the feed additive	Additive	Composition, chemical formula, description,	Species or	Marinaum	Minimum content	Maximum content		End of period of
			cate- gory of animal	Maximum age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
		cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopoeia monograph 0348						
	of the analytical metho on-reports_en.	ds are available at the following address of th	e Reference	Laboratory: ht	tps://joint-resea	rch-centre.ec.europa	.eu/eurl-fa-eurl-feed-additives/eurl-fa-aut	horisation/eurl-fa-

Identification number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or cate- gory of animal	Maximum age	feedingstuff	Maximum content re/kg of complete with a moisture nt of 12 %	Other provisions	End of period of authorisation
Category: t	Hydroxypropyl methyl cellulose	es. Functional group: gelling agents Additive composition Hydroxypropyl methyl cellulose Solid form Characterisation of the active substance Hydroxypropyl methyl cellulose manufactured reacting partially depolymerised cellulose with methyl	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business 	19 February 2035

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	analytical method	cate- gory of animal	age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions	authorisation
		groups and containing a small degree of hydroxypropyl substitution CAS No: 9004-65-3 Methoxyl groups (-OCH₃): 19-30 % Hydroxypropoxyl groups (-OCH₂CHOHCH₃): 3-12 % Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % (for products with viscosity of 50 mPa.s or above); ≤ 3 % (for products with viscosity below 50 mPa.s) Propylene chlorohydrins: ≤ 0,1 mg/kg Analytical method (¹) For the identification/characterisation of hydroxypropyl methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for hydroxypropyl methyl cellulose and the corresponding methods of the FAO JECFA 'Hydroxypropyl methyl cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopoeia monograph 0348					operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	analytical method	cate- gory of animal	age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions	authorisation
Category:	technological additiv	es. Functional group: binders						_
1c464	Hydroxypropyl methyl cellulose	Additive composition Hydroxypropyl methyl cellulose Solid form Characterisation of the active substance Hydroxypropyl methyl cellulose manufactured reacting partially depolymerised cellulose with methyl groups and containing a small degree of hydroxypropyl substitution CAS No: 9004-65-3 Methoxyl groups (-OCH₃): 19-30 % Hydroxypropoxyl groups (-OCH₂CHOHCH₃): 3-12 % Loss on drying: ≤ 10 % Sulfated ash: ≤ 1,5 % (for products with viscosity of 50 mPa.s or above); ≤ 3 % (for products with viscosity below 50 mPa.s) Propylene chlorohydrins: ≤ 0,1 mg/kg Analytical method (¹) For the identification/characterisation of hydroxypropyl methyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for hydroxypropyl methyl cellulose and the corresponding methods of the FAO JECFA 'Hydroxypropyl methyl	All animal species		-		 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

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Identifica- tion	Additive	Composition, chemical formula, description, analytical method	Species	Maximum	Minimum content	Maximum content		End of noviod of
number of the feed additive			cate- gory of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	End of period of authorisation
		cellulose' monograph, the 'Volume 4' of FAO JECFA combined compendium for food additives specifications and the European Pharmacopoeia monograph 0348						

(1)	etails of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-
	<i>r</i> aluation-reports_en.

Identification number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	feedingstuff	Maximum content re/kg of complete with a moisture nt of 12 %		Other provisions	End of period of authorisation
Category:	technological additiv	es. Functional group: emulsifiers		•					
1c466	Sodium carboxymethyl cellulose	Additive composition Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis) Solid form Characterisation of the active substance Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis), obtained by etherification reaction	All animal species	-	-	-	2.	In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and	19 February 2035

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	analytical method	category of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
		between the alkali-cellulose complex and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anhydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications.					organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	analytical method	category of animal	age	feedingstuff	re/kg of complete with a moisture nt of 12 %	Other provisions	authorisation
Category: t	echnological additiv	es. Functional group: stabilisers						
1c466	Sodium carboxymethyl cellulose	Additive composition Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis) Solid form Characterisation of the active substance Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis), obtained by etherification reaction between the alkali-cellulose complex and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl	All animal species		-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

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Identification number of the feed additive		analytical method	Species or category of animal	Maximum - age	Minimum content	Maximum content		End of period of
	Additive				mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
		cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications.						
	of the analytical metho on-reports_en.	ods are available at the following address of	the Reference	Laboratory: ht	tps://joint-resear	ch-centre.ec.europa.	eu/eurl-fa-eurl-feed-additives/eurl-fa-au	ithorisation/eurl-fa-
Identifica- tion		Composition chemical formula description	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed	Additive	Additive Composition, chemical formula, description, analytical method		age	mg of additive/kg of complete		Other provisions	End of period of authorisation

Identifica- tion		. I Composition, chemical formula, description. I *	Species or	Maximum -	Minimum content	Maximum content	Other provisions	End of period of
the feed additive	Additive	analytical method	category of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		Other provisions	authorisation
Category:	technological additiv	es. Functional group: thickeners						
1c466	Sodium carboxymethyl cellulose	Additive composition Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis) Solid form Characterisation of the active substance Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis), obtained by etherification reaction between the alkali-cellulose complex	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to 	19 February 2035

Identifica- tion		Additive Composition, chemical formula, description, analytical method	Species or	Species or Maximum		Maximum content		End of period of
number of the feed additive	Additive		category of animal	Maximum age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions	authorisation
		and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications.					address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	

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

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Identifica- tion		Composition, chemical formula, description,	Species or	Maximum	Minimum content	Maximum content		End of period of
number of the feed additive	Additive	analytical method	category of animal	age	mg of additive/kg of complete feedingstuff with a moisture content of 12 %		n a moisture	
Category:	technological additiv	res. Functional group: gelling agents						
1c466	Sodium carboxymethyl cellulose	Additive composition Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis) Solid form Characterisation of the active substance Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis), obtained by etherification reaction between the alkali-cellulose complex and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl	All animal species			-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment. 	19 February 2035

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Identifica- tion	S	Species or Variance	Marina	Minimum content	Maximum content		End of period of	
number of the feed additive	imber of he feed Additive Composition, characteristics and Additive	Composition, chemical formula, description, analytical method	category of animal	Maximum age	feedingstuff	ve/kg of complete with a moisture nt of 12 %	Other provisions	End of period of authorisation
		cellulose' monograph and the 'Volume 4' of FAO JECFA combined compendium for food additives specifications.						
	of the analytical metho	ods are available at the following address of	the Reference	Laboratory: ht	tps://joint-resear	rch-centre.ec.europa.	eu/eurl-fa-eurl-feed-additives/eurl-fa-au	thorisation/eurl-fa
	on-reports_en.				1 117			,

tion number of the feed additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	feedingstuff	content ve/kg of complete with a moisture nt of 12 %	Other provisions	End of period of authorisation
Category:	technological additiv	es. Functional group: binders						
1c466	Sodium carboxymethyl cellulose	Additive composition Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis) Solid form Characterisation of the active substance Sodium carboxymethyl cellulose ≥ 99,5 % (on the anhydrous basis), obtained by etherification reaction between the alkali-cellulose complex	All animal species	-	-	-	 In the directions for use of the additive and premixtures, the storage conditions and the stability to heat treatment shall be indicated. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to 	19 February 2035

	Composition, chemical formula, description, analytical method	Species or	Marianan	Minimum content	Maximum content		End of period of authorisation
Additive		category of animal	age	feedingstuff	with a moisture	Other provisions	
	and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose' monograph and the 'Volume 4' of FAO JECFA combined			Conte	11 01 12 70	address potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal skin, eye and breathing protective equipment.	
	Additive	and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl	and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose' monograph and the 'Volume 4' of FAO JECFA combined	Additive Composition, chemical formula, description, analytical method and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose' monograph and the 'Volume 4' of FAO JECFA combined	Additive Composition, chemical formula, description, analytical method CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose' monograph and the 'Volume 4' of FAO JECFA combined	Additive Composition, chemical formula, description, analytical method and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH₂COOH): 0,2-1,5 per anydroglucose unit Loss on drying: ≤ 12 % Total glycolate: ≤ 0,4 % (as sodium glycolate on the anhydrous basis) Sodium: ≤ 12,4 % (on the anhydrous basis) Analytical method (¹) For the identification/characterisation of sodium carboxymethyl cellulose in the feed additive: — Regulation (EU) No 231/2012 for sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose' monograph and the 'Volume 4' of FAO JECFA combined	Additive Composition, chemical formula, description, analytical method Species or category of animal age of the content of 12 % and monochloroacetic acid CAS No: 9000-32-4 Carboxymethyl groups (-CH_2COOH): 0,2-1,5 per anydroglucose unit Loss on drying: \$\leq 12\% Total glycolate: \$\leq 0.4\% (as sodium glycolate on the anhydrous basis) Sodium: \$\leq 12.4\% (on the anhydrous basis) Analytical method (') For the identification/characterisation of sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose and the corresponding methods of FAO JECFA 'sodium carboxymethyl cellulose 'monograph and the Volume 4' of FAO JECFA combined

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