

							Official Journal		
							No	page	date
► <u>M1</u>	Commission Implementing Regulation (EU) 2023/585 of 15 March 2023						L 77	7	16.3.2023
► <u>M2</u>	Commission Implementing Regulation (EU) 2024/2179 of 2 September 2024						L 2179	1	3.9.2024

**COMMISSION IMPLEMENTING REGULATION (EU) 2022/1452****of 1 September 2022**

concerning the authorisation of 3-ethylcyclopentan-1,2-dione, 4-hydroxy-2,5-dimethylfuran-3(2H)-one, 4,5-dihydro-2-methylfuran-3(2H)-one, eugenol, 1-methoxy-4-(prop-1(trans)-enyl)benzene, α -pentylcinnamaldehyde, α -hexylcinnamaldehyde and 2-acetylpyridine as feed additives for certain animal species

(Text with EEA relevance)

*Article 1***Authorisation**

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

*Article 2***Transitional measures**

1. The substances specified in the Annex and premixtures containing these substances, which are produced and labelled before 22 March 2023 in accordance with the rules applicable before 22 September 2022 may continue to be placed on the market and used until the existing stocks are exhausted.
2. Compound feed and feed materials containing these substances as specified in the Annex which are produced and labelled before 22 September 2023 in accordance with the rules applicable before 22 September 2022 may continue to be placed on the market and used until the existing stocks are exhausted if they are intended for food-producing animals.
3. Compound feed and feed materials containing these substances as specified in the Annex which are produced and labelled before 22 September 2024 in accordance with the rules applicable before 22 September 2022 may continue to be placed on the market and used until the existing stocks are exhausted if they are intended for non-food-producing animals.

*Article 3***Entry into force**

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

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

ANNEX

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

Category: Sensory additives. Functional group: Flavouring compounds

2b07057	3-Ethyl- cyclo- pentan- 1,2-dione	<i>Additive composition</i> Preparation of 3-ethylcyclopentan-1,2-dione <i>Characterisation of active substance</i> 3-Ethylcyclopentan-1,2-dione Produced by chemical synthesis Purity: > 90 % Chemical formula: C ₇ H ₁₀ O ₂ CAS number: 21835-01-8 FLAVIS: 07.057	All animal species	-	-	-	<ol style="list-style-type: none">1. The additive shall be incorporated into the feed in the form of a premixture.2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated.3. On the label of the additive the following shall be indicated: ‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: – animals farmed in marine aquaculture systems:0,05 mg; — cats, dogs and animals farmed in land-based aquaculture systems: 5 mg/kg; — other terrestrial species or categories of animals: 0,5 mg.’4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3.	22 September 2032
		<i>Analytical method</i> (1) For the identification of the additive in mixtures of flavourings: — Gas chromatography mass spectrometry with retention time locking GC-MS-RTL						

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Identi- fication number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
							5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	

(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

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

Category: Sensory additives. Functional group: Flavouring compounds

2b13010	4-Hydroxy-2,5-dimethylfuran-3(2H)-one	<i>Additive composition</i> 4-Hydroxy-2,5-dimethylfuran-3(2H)-one <i>Characterisation of active substance</i> 4-Hydroxy-2,5-dimethylfuran-3(2H)-one	Cats and dogs	-	-	-	1. The additive shall be incorporated into the feed in the form of a premixture. 2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated.	22 September 2032
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Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
		<p>Produced by chemical synthesis</p> <p>Purity: 98 %</p> <p>Chemical formula: C₆H₈O₃</p> <p>CAS number: 3658-77-3</p> <p>FLAVIS: 13.010</p>					<p>► M2 3. On the label of the additive the following shall be indicated:</p> <p>‘Recommended maximum content of the active substance per kg of complete feed-ingstuff with a moisture content of 12 %:</p> <p>— cats: 18 mg</p> <p>— dogs: 25 mg’ ◀</p> <p>4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3.</p> <p>5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.</p>	

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

Category: Sensory additives. Functional group: Flavouring compounds

2b13042	4,5-Dihydro-2-methylfuran-3(2H)-one	<p><i>Additive composition</i></p> <p>4,5-Dihydro-2-methylfuran-3(2H)-one</p> <p><i>Characterisation of active substance</i> 4,5-Dihydro-2-methylfuran-3(2H)-one</p> <p>Produced by chemical synthesis</p> <p>Purity: 97 %</p> <p>Chemical formula: C₅H₈O₂</p> <p>CAS number: 3188-00-9</p> <p>FLAVIS: 13.042</p>	Cats and dogs	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: <p>‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %:</p> <p>— cats and dogs: 5 mg.’</p> The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum 	22 September 2032
		<p><i>Analytical method</i> ⁽¹⁾</p> <p>For the identification of the additive in mixtures of flavourings:</p> <p>— Gas chromatography mass spectrometry with retention time locking GC-MS-RTL</p>						

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Identi- fication number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
							by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	

(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

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

Category: Sensory additives. Functional group: Flavouring compounds

2b04003	Eugenol	<i>Additive composition</i> Eugenol <i>Characterisation of active substance</i> Eugenol ► M1 Produced by chemical synthesis or by the extraction from cloves or cloves oil ◀	All animal species except poultry and fish	-	-	-	<ol style="list-style-type: none">1. The additive shall be incorporated into the feed in the form of a premixture.2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated.3. On the label of the additive the following shall be indicated:	22 September 2032
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Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
		Purity: > 98 % Chemical formula: C ₁₀ H ₁₂ O ₂ CAS number: 97-53-0 FLAVIS: 04.003					<p>‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %:</p> <p>— all animal species except poultry and fish: 25 mg.’</p> <p>4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3.</p> <p>5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.</p>	
		<i>Analytical method</i> ⁽¹⁾ For the identification of the additive in mixtures of flavourings: — Gas chromatography mass spectrometry with retention time locking GC-MS-RTL			-	-		

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

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

Category: Sensory additives. Functional group: Flavouring compounds

2b04010	1-Methoxy-4-(prop-1(trans)-enyl)b-enzene	<p><i>Additive composition</i></p> <p>1-Methoxy-4-(prop-1(trans)-enyl)benzene</p> <p><i>Characterisation of active substance</i> 1-Methoxy-4-(prop-1(trans)-enyl)benzene</p> <p>► M1 Produced by chemical synthesis or by the extraction from pine oil ◀</p> <p>Purity: > 99 %</p> <p>Chemical formula: C₁₀H₁₂O</p> <p>CAS number: 4180-23-8</p> <p>FLAVIS: 04.010</p>	All animal species except poultry and fish	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: ‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — all animal species except poultry and fish: 25 mg.’ The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum 	22 September 2032
		<p><i>Analytical method</i> ⁽¹⁾</p> <p>For the identification of the additive in mixtures of flavourings:</p> <p>— Gas chromatography mass spectrometry with retention time locking GC-MS-RTL</p>						

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Identifi- cation number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
							by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	

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

Category: Sensory additives. Functional group: Flavouring compounds

2b05040	α -Pentylcinnamaldehyde	<p><i>Additive composition</i></p> <p>α-Pentylcinnamaldehyde</p> <p><i>Characterisation of active substance</i>α-Pentylcinnamaldehyde</p>	All animal species	-	-	-	<p>1. The additive shall be incorporated into the feed in the form of a premixture.</p> <p>2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated.</p>	22 September 2032
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Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
		<p>Produced by chemical synthesis</p> <p>Purity: min. 97 %</p> <p>Chemical formula: C₁₄H₁₈O</p> <p>CAS number: 122-40-7</p> <p>FLAVIS: 05.040</p>					<p>3. On the label of the additive the following shall be indicated:</p> <p>‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %:</p> <p>— animals farmed in marine aquaculture systems:</p> <p>0,05 mg;</p> <p>— cats: 1 mg/kg;</p> <p>— dogs and animals farmed in land-based aquaculture systems: 5 mg/kg;</p> <p>— other terrestrial species or categories of animals: 0,1 mg.’</p> <p>4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3.</p> <p>5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum</p>	
		<p><i>Analytical method</i> ⁽¹⁾</p> <p>For the identification of the additive in mixtures of flavourings:</p> <p>— Gas chromatography mass spectrometry with retention time locking GC-MS-RTL</p>						

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Identifi- cation number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
							by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	

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

Category: Sensory additives. Functional group: Flavouring compounds

2b05041	α -Hexylcinnamaldehyde	<p><i>Additive composition</i></p> <p>α-Hexylcinnamaldehyde</p> <p><i>Characterisation of active substance</i>α-Hexylcinnamaldehyde</p> <p>Produced by chemical synthesis</p> <p>Purity: 95 %</p> <p>Chemical formula: C₁₅H₂₀O</p>	All animal species	-	-	-	<ol style="list-style-type: none"> The additive shall be incorporated into the feed in the form of a premixture. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. On the label of the additive the following shall be indicated: ‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: 	22 September 2032
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Identifi- cation number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
		CAS number: 101-86-0 FLAVIS: 05.041 <i>Analytical method</i> ⁽¹⁾ For the identification of the additive in mixtures of flavourings: — Gas chromatography mass spec- trometry with retention time locking GC-MS-RTL					<div>— animals farmed in marine aquaculture systems: 0,05 mg;</div> <div>— cats: 1 mg/kg;</div> <div>— dogs and animals farmed in land-based aquaculture systems: 5 mg/kg;</div> <div>— other terrestrial species or categories of animals: 0,1 mg.’</div> <div>4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3.</div> <div>5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.</div>	

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Identification number of the additive	Additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
Category: Sensory additives. Functional group: Flavouring compounds								
2b14038	2-Acetylpyridine	<p><i>Additive composition</i></p> <p>2-Acetylpyridine</p> <p><i>Characterisation of active substance</i>2-Acetylpyridine</p> <p>Produced by chemical synthesis</p> <p>Purity: > 97 %</p> <p>Chemical formula: C₇H₇ON</p> <p>CAS number: 1122-62-9</p> <p>FLAVIS: 14.038</p>	All animal species	-	-	-	<p>1. The additive shall be incorporated into the feed in the form of a premixture.</p> <p>2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated.</p> <p>3. On the label of the additive the following shall be indicated:</p> <p>‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %:</p> <p>— marine animals:</p> <p>0,05 mg;</p> <p>— other species or categories of animals: 0,5 mg.’</p> <p>4. The functional group, the identification number, the name and the added amount of the active substance shall be indicated on the label of the premixture where the use level on the label of the premixture would result in exceeding the level referred to in point 3.</p> <p>5. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address potential risks by inhalation, dermal contact or eyes contact. Where those risks cannot be eliminated or reduced to a minimum</p>	22 September 2032
		<p><i>Analytical method</i> ⁽¹⁾</p> <p>For the identification of the additive in mixtures of flavourings:</p> <p>— Gas chromatography mass spectrometry with retention time locking GC-MS-RTL</p>						

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					mg of additive/kg of complete feedingstuff with a moisture content of 12 %			
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