



2025/2498

12.12.2025

**COMMISSION IMPLEMENTING REGULATION (EU) 2025/2498**

**of 11 December 2025**

**concerning the authorisation of 4-hydroxy-2,5-dimethylfuran-3(2H)-one as a feed additive for all animal species, except cats and dogs**

**(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 <sup>(1)</sup>, 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.
- (2) In accordance with Article 7 of Regulation (EC) No 1831/2003, an application was submitted for the authorisation of 4-hydroxy-2,5-dimethylfuran-3(2H)-one. That application was accompanied by the particulars and documents required under Article 7(3) of Regulation (EC) No 1831/2003.
- (3) The application concerns the authorisation of 4-hydroxy-2,5-dimethylfuran-3(2H)-one, as a feed additive for all animal species, except cats and dogs, requesting that additive to be classified in the category 'sensory additives' and in the functional group 'flavouring compounds'.
- (4) The European Food Safety Authority ('the Authority') concluded in its opinion of 24 June 2025 <sup>(2)</sup> that, under the proposed conditions of use, 4-hydroxy-2,5-dimethylfuran-3(2H)-one is safe for the target species as well as for consumers and the environment. The Authority also concluded that the additive is irritant to the skin, eyes and respiratory tract and is a dermal and respiratory sensitiser. Any exposure of users to 4-hydroxy-2,5-dimethylfuran-3(2H)-one is considered a risk. In addition, the Authority concluded that since 4-hydroxy-2,5-dimethylfuran-3(2H)-one is used in food as a flavouring and in feed for cats and dogs, no further demonstration of efficacy is necessary. It did not consider that there is a need for specific requirements of post-market monitoring.
- (5) The Reference Laboratory set up by Regulation (EC) No 1831/2003 considered that the conclusions and recommendations reached in a previous assessment concerning another application for the authorisation of the same additive and verified by the Authority in its opinion of 23 July 2012 <sup>(3)</sup> are valid and applicable for the current application. In accordance with Article 5(4), point (a), of Commission Regulation (EC) No 378/2005 <sup>(4)</sup>, an evaluation report of the Reference Laboratory was therefore not required.
- (6) In view of the above, the Commission considers that 4-hydroxy-2,5-dimethylfuran-3(2H)-one satisfies the conditions provided for in Article 5 of Regulation (EC) No 1831/2003. Accordingly, the use of that substance should be authorised for all animal species, except cats and dogs. In addition, the Commission considers that appropriate protective measures should be taken to prevent adverse effects on the health of the users of the additive.

<sup>(1)</sup> OJ L 268, 18.10.2003, p. 29, ELI: <http://data.europa.eu/eli/reg/2003/1831/oj>.

<sup>(2)</sup> EFSA Journal 2025; 23:e9538. <https://doi.org/10.2903/j.efsa.2025.9538>.

<sup>(3)</sup> EFSA Journal 2012; 10(7):2786, <https://doi.org/10.2903/j.efsa.2012.2786>.

<sup>(4)</sup> Commission Regulation (EC) No 378/2005 of 4 March 2005 on detailed rules for the implementation of Regulation (EC) No 1831/2003 of the European Parliament and of the Council as regards the duties and tasks of the Community Reference Laboratory concerning applications for authorisations of feed additives (OJ L 59, 5.3.2005, p. 8, ELI: <http://data.europa.eu/eli/reg/2005/378/oj>).

- (7) The Commission considers that safety reasons do not require the setting of maximum contents for 4-hydroxy-2,5-dimethylfuran-3(2H)-one. In order to allow better control, the recommended maximum content should be indicated on the label of the additive. Where the recommended maximum content is exceeded, certain information should be indicated on the label of the premixtures concerned.
- (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 substance specified in the Annex, belonging to the additive category 'sensory additives' and to the functional group 'flavouring compounds', is authorised as an additive in animal nutrition, subject to the conditions laid down in that Annex.

*Article 2*

**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, 11 December 2025.

*For the Commission*  
*The President*  
Ursula VON DER LEYEN

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ANNEX

Identification number of the feed additive	Name of the 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 the 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	<p><i>Additive composition</i> 4-Hydroxy-2,5-dimethylfuran-3 (2H)-one</p> <p><i>Characterisation of active substance</i> 4-Hydroxy-2,5-dimethylfuran-3 (2H)-one Produced by chemical synthesis Purity: 98 % Chemical formula: C<sub>6</sub>H<sub>8</sub>O<sub>3</sub> CAS number: 3658-77-3 FLAVIS: 13.010</p> <p><i>Analytical method</i> <sup>(1)</sup> For the identification of the additive in mixtures of flavourings: — Gas chromatography mass spectrometry with retention time locking GC-MS-RTL.</p>	All animal species, except cats and dogs	-	-	-	<p>1. The additive shall be incorporated into the feed in the form of a premixture.</p> <p>2. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated.</p> <p>3. On the label of the additive the following shall be indicated: ‘Recommended maximum content of the active substance per kg of complete feedingstuff with a moisture content of 12 %: — all animal species, except cats and dogs: 10 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>	1 January 2036

Identification number of the feed additive	Name of the 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 the 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 by such procedures and measures, the additive and premixtures shall be used with personal protective equipment, including skin, eye and breathing protection.	

(<sup>1</sup>) 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](https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en).