

## EN

ANNEX

Identi- fication number of the feed additive	Name of the additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maxi mum age	Minimum content	Maximum content	Other provisions	End of period of authorisa- tion
					mg of additive/kg of complete feed with a moisture content of 12%			
Category: Sensory additives. Functional group: Flavouring compounds								
2b52-eo	Celery seed essential oil	<b>Additive composition</b>  Essential oil from the fruit of <i>Apium graveolens</i> L.  Liquid form	Turkeys for fattening	-	-	2,1	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. Mixture of celery seed essential oil with other botanical additives is permitted provided that the levels of perillaldehyde and furocoumarins in feed	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Chickens for fattening and minor poultry for fattening	-	-	1,6		
		<b>Characterisation of active substance</b>  Celery seed essential oil:	All poultry reared for laying or breeding	-	-	1,6		
		Essential oil, as defined by the Council of Europe (CoE) <sup>1</sup> , obtained from the fruit of <i>Apium graveolens</i> L.by steam distillation and further condensation of	Ornamental birds	-	-	1,6		
			All poultry for laying or breeding			2,3		

<sup>1</sup> Natural sources of flavourings – Report No 2 (2007).

volatile constituents and separation from the aqueous phase by decantation.  CAS number: 8015-90-5 EINECS number: 289-668-4 FEMA number: 2271 CoE number: 52  <u>Specifications</u> <i>d</i> -Limonene: 35-79 % $\beta$ -Selinene: 5-20 % Senkyunolide A: 1,5-22 % $\beta$ -Pinene (pin-2(10)-ene): 0,3-2 % Perillaldehyde: $\leq 0,025$ % Furocoumarins: - Bergapten: $\leq 0,001$ % - Psoralen: $< 0,00025$ % - Xanthoxin: $< 0,00025$ % - Isopimpinellin: $< 0,00025$ % - Isoimperatorin: $< 0,0005$ %  <b>Analytical method <sup>(2)</sup></b>	Pigs for fattening	-	-	3,3	materials and compound feed are lower than the ones resulting from the use of a single additive at the maximum or recommended level for the relevant species or animal category.  4. 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.
	Pigs for fattening of minor <i>Suidae</i>	-	-	2,8	
	Piglets (suckling and weaned) of all <i>Suidae</i>	-	-	2,8	
	All <i>Suidae</i> for reproduction	-	-	4,1	
	Calves for fattening	6 months	-	6,5	
	Sheep and goats	-	-	6,2	
	Cattle for fattening; other ruminants for fattening except sheep, goats and calves for fattening up to 6 months; <i>Camelidae</i> for fattening	-	-	6,2	
	All other ruminants;	-	-	4	

<sup>2</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).

For the determination of limonene (phytochemical marker) in the feed additive: - gas chromatography coupled to flame ionisation detection (GC-FID) (ISO 3760)	all other <i>Camelidae</i>			
	<i>Equidae</i>	-	-	6,2
	<i>Leporidae</i>	-	-	2,5
	Salmonids and minor fin fish	-	-	6,8
	Dogs	-	-	7,2

Identi- fication number of the feed additive	Name of the additive	Composition, chemical formula, description, analytical method	Species or category of animal	Maxi- mum age	Minimum content	Maximum content	Other provisions	End of period of authorisa- tion
					mg of additive/kg of complete feed with a moisture content of 12%			
Category: Sensory additives. Functional group: Flavouring compounds								
2b112-eo	Caraway essential oil	<b>Additive composition</b>  Essential oil from the fruit of <i>Carum carvi</i> L.  Liquid form  <b>Characterisation of active substance</b>  Caraway essential oil:  Essential oil, as defined by the Council of Europe <sup>3</sup> , obtained from the dried, ripe fruit of <i>Carum carvi</i> L.by steam distillation and further condensation of volatile constituents and separation from the aqueous phase by decantation.  CAS number: 8000-42-8 EINECS number: 288-921-6 FEMA number: 2238 CoE number: 112  <u>Specifications</u>	Turkeys for fattening	-	-	12	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. Mixture of caraway essential oil with other botanical additives is permitted provided that the levels of perillaldehyde in feed materials and compound feed are lower than the ones resulting from the use of a single additive at the maximum or recommended level for the relevant species or animal category.	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Chickens for fattening and minor poultry for fattening	-	-	9		
			All poultry reared for laying or breeding	-	-	9		
			Ornamental birds	-	-	9		
			All poultry for laying or breeding	-	-	13		
			Pigs for fattening	-	-	19		
			Pigs for fattening of minor <i>Suidae</i>	-	-	16		
			Piglets (suckling	-	-	16		

<sup>3</sup> Natural sources of flavourings – Report No 2 (2007).

- *d*-Carvone: 45-65 %
- *d*-Limonene: 30-50 %
- Perillaldehyde: ≤ 0,5 %

**Analytical method<sup>(4)</sup>**

For the determination of limonene and carvone (phytochemical markers) in the feed additive:

- gas chromatography coupled to flame ionisation detection (GC-FID) (European Pharmacopoeia monograph 1817)

and weaned) of all <i>Suidae</i>			
All <i>Suidae</i> for reproduction	-	-	24
Calves for fattening	6 months	-	35
Sheep and goats	-	-	10
Cattle for fattening, other ruminants for fattening except sheep, goats and calves for fattening up to 6 months; <i>Camelidae</i> for fattening	-	-	11
All other ruminants; all other <i>Camelidae</i>	-	-	10
<i>Equidae</i>	-	-	10
<i>Leporidae</i>	-	-	10
Salmonids and minor fin fish	-	-	25

4. 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.

<sup>4</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).

			Dogs	-	-	25		
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