

**EN**  
**ANNEX**

Identi- fication number of the feed 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 authorisa- tion
					mg/kg of complete feed with 12 % moisture content			
Category: nutritional additives. Functional group: amino acids, their salts and analogues								
3c391	L-cystine	<b>Additive composition</b> L-cystine with a minimum content of 98,5 %  Solid form.  <b>Characterisation of the active substance</b> L-cystine produced by hydrolysis of keratin from poultry feathers  IUPAC name: (2R)-2-amino-3- [(2R)-2-amino-3-hydroxy-3-oxopropyl] disulfanyl-propanoic acid  CAS number: 56-89-3  Chemical formula: C <sub>6</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub>  <b>Analytical method<sup>1</sup></b> For the identification of L-cystine in the feed additive:	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.  2. The labelling of the additive and premixtures shall indicate the following:  — ‘Supplementation with L-cystine shall depend on the requirements of the target animals for sulphur-containing amino acids and the level of other sulphur-containing amino acids in the ration.’  3. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational	[10 years from the date of entry into force of this Regulation. To be completed by the OP]

<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).

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					mg/kg of complete feed with 12 % moisture content			
Category: nutritional additives. Functional group: amino acids, their salts and analogues								
		<p>– Food Chemical Codex “L-cystine monograph”</p> <p>For the determination of cystine in the feed additive:</p> <p>– Ion-exchange chromatography coupled with post-column derivatisation and optical detection (IEC-VIS/FLD)</p> <p>For the determination of cystine in premixtures:</p> <p>– Ion-exchange chromatography coupled with post-column derivatisation and optical detection (IEC-VIS) – Commission Regulation (EC) No 152/2009 or</p> <p>– Ion-exchange chromatography coupled with post-column derivatisation and optical detection (IEC-VIS/FLD)</p> <p>For the determination of cystine in compound feed:</p> <p>– Ion-exchange chromatography coupled with post-column derivatisation and optical detection (IEC-VIS) – Commission Regulation (EC) No 152/2009</p>					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 breathing protective equipment.	