

ANNEX

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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a296	DL-Malic acid	<p>Additive composition DL-Malic acid $\geq 99,5\%$</p> <p>Characterisation of the active substance DL Malic acid $\geq 99,5\%$ C₄H₆O₅ CAS No 6915-15-7 (or 617-48-1) Sulphated ash $\leq 0,02\%$ Fumaric acid $\leq 1\%$ Maleic acid $\leq 0,05\%$ Produced by chemical synthesis</p> <p>Method of Analysis¹ For the quantification of the malic acid in the feed additive: - titration with sodium hydroxide (European Pharmacopoeia Monograph 2080) For the quantification of the malic acid (expressed as total malic acid) in the premixtures and feedingstuffs: - ion exclusion High Performance Liquid Chromatography with UV detection (HPLC-UV)</p>	All animal species	-	-	-	For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections.	<i>[10 years from the date of entry into force of this Regulation To be completed by the Service responsible for the publication]</i>

¹Details of the analytical methods are available at the following address of the Reference Laboratory: <https://ec.europa.eu/jrc/en/eurl/feed-additives/evaluation-reports>

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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a330	Citric acid	<p>Additive composition Citric acid ≥ 99.5 % (in dry matter)</p> <p>Characterisation of the active substance Citric acid ≥ 99.5 % Anhydrous form: C₆H₈O₇ CAS No 77-92-9 Monohydrate form: C₆H₈O₇.H₂O CAS No 5949-29-1 sulphated ash < 0.05% oxalic acid < 100 mg/kg</p> <p>Produced by: - <i>Aspergillus niger</i> DSM 25794 or - <i>Aspergillus niger</i> CGMCC 4513/CGMCC 5751 or - <i>Aspergillus niger</i> CICC 40347/CGMCC 5343</p> <p>Method of Analysis¹ For the quantification of citric acid in the feed additive: - titration with sodium hydroxide (European Pharmacopoeia, Monograph 0455 and 0456) For the quantification of citric acid as total citric acid in the premixtures and feedingstuffs: - ion exclusion High Performance Liquid Chromatography with Refractive index or UV detection (HPLC-RI/UV)</p>	All animal species	-		15000	<p>1. “The mixture of different sources of citric acid shall not exceed the permitted maximum levels in complete feedingstuffs.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections.</p>	<i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i>

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: acidity regulators								
1a330	Citric acid	<p>Additive composition Citric acid ≥ 99.5 % (in dry matter)</p> <p>Characterisation of the active substance Citric acid ≥ 99.5 % Anhydrous form: C₆H₈O₇ CAS No 77-92-9 Monohydrate form: C₆H₈O₇.H₂O CAS No 5949-29-1 sulphated ash < 0.05% oxalic acid < 100 mg/kg Produced by: - <i>Aspergillus niger</i> DSM 25794 or - <i>Aspergillus niger</i> CGMCC 4513/CGMCC 5751 or - <i>Aspergillus niger</i> CICC 40347/CGMCC 5343</p> <p>Method of Analysis¹ For the quantification of citric acid in the feed additive: - titration with sodium hydroxide (European Pharmacopoeia, Monograph 0455 and 0456) For the quantification of citric acid as total citric acid in the premixtures and feedingstuffs: - ion exclusion High Performance Liquid Chromatography with Refractive index or UV detection (HPLC-RI/UV)</p>	All animal species	-		15000	<p>1. “The mixture of different sources of citric acid shall not exceed the permitted maximum levels in complete feedingstuffs.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections.</p>	<i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i>

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives.								
1a200	Sorbic acid	<p>Additive composition</p> <p>Sorbic acid ≥ 99%</p> <p>Solid form</p> <p>Active substance</p> <p>Sorbic acid ≥ 99%</p> <p>C₆H₈O₂ CAS No 110-44-1</p> <p>Sulphate ash ≤ 0.2%</p> <p>Aldehydes ≤ 0.1%</p> <p>Produced by chemical synthesis</p> <p>Analytical method¹</p> <p>For the determination of sorbic acid in feed additive:</p> <p>- titration with sodium hydroxide (European Pharmacopoeia 6.0, method 01/2008:0592)</p> <p>For the determination of sorbic acid in premixtures and feedingstuffs:</p> <p>- ion exclusion High Performance Liquid Chromatography with UV detection (HPLC-UV)</p>	<p>All animal species other than ruminants with a non-functional rumen</p> <p>Ruminants with a non-functional rumen</p>	-	-	2 500	<p>1. “The mixture of different sources of sorbic acid shall not exceed the permitted maximum levels in complete feedingstuffs.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections.</p>	<p><i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i></p>

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1k202	Potassium sorbate	<p>Additive composition</p> <p>Potassium sorbate ≥ 99%</p> <p>Solid form</p> <p>Active substance</p> <p>Potassium sorbate ≥ 99%</p> <p>C₆H₇KO₂ CAS No 24634-61-5</p> <p>Produced by chemical synthesis</p> <p>Analytical method¹</p> <p>For the determination of potassium sorbate in feed additive:</p> <p>- titration with perchloric acid (European Pharmacopoeia 6.0, method 01/2008:0618)</p> <p>For the determination of potassium sorbate in premixtures and feedingstuffs:</p> <p>- ion exclusion High Performance Liquid Chromatography with UV detection (HPLC-UV)</p>	All animal species other than ruminants with a non-functional rumen	-	-	2500 (sorbic acid)	<p>1. “The mixture of different sources of potassium sorbate shall not exceed the permitted maximum levels in complete feedingstuffs.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections.</p>	<p><i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i></p>
			Ruminants with a non-functional rumen		-	6700 (sorbic acid)		

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a260 2b08002	Acetic acid	<p>Additive composition</p> <p>Acetic acid \geq 99.8 %</p> <p>Liquid form</p> <p>Characterisation of the active substance</p> <p>Acetic acid \geq 99.8 %</p> <p>C₂H₄O₂ CAS no 64-19-7</p> <p>Water \leq 0.15%</p> <p>Non volatile matter \leq 30 mg/kg</p> <p>Formic acid and its salts and other oxidisable material \leq 1g/kg</p> <p>Produced by chemical synthesis including cellulose production (as a by-product)</p> <p>Method of Analysis¹</p> <p>For the determination of acetic acid in feed additive:</p> <ul style="list-style-type: none"> - titration with sodium hydroxide (European Pharmacopoeia, monograph 0590) <p>For the determination of acetic acid as total acetic acid content in premixtures and feedingstuffs:</p> <ul style="list-style-type: none"> - ion exclusion chromatography with UV and/or refractive index detection (HPLC-UV/RI) 	Poultry Pigs Pets	-	-	2 500	<p>1. “The mixture of different sources of acetic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections.</p>	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Ruminants		-	-		

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a262	Sodium diacetate	<p><i>Additive composition</i></p> <p>Sodium diacetate ≥ 58 % (Solid form)</p> <p><i>Characterisation of the active substance</i></p> <p>Sodium diacetate (anhydrous and trihydrate) ≥ 58 % NaC₄H₇O₄ CAS no 126-96-5 Acetic acid ≥ 39 % Water ≤ 2% Non volatile matter ≤ 30 mg/kg Formic acid and its salts and other oxidisable material ≤ 1g/kg</p> <p><i>Method of Analysis¹</i></p> <p>For the determination of sodium diacetate in feed additive: - titration with sodium hydroxide and titration with perchloric acid (European Pharmacopoeia, monographs 0590 and 0411)</p> <p>For the determination of sodium diacetate as total acetic acid content in premixtures, feedingstuffs: - ion exclusion chromatography with UV and/or refractive index detection (HPLC-UV/RI)</p>	Poultry Pigs Pets	-	-	2 500 (as acetic acid)	<p>1. “The mixture of different sources of acetic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Ruminants	-	-			

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a263	Calcium acetate (anhydrous and monohydrate)	<p><i>Additive composition</i></p> <p>Calcium acetate ≥ 98.7 %</p> <p>Solid form</p> <p><i>Characterisation of the active substance</i></p> <p>Calcium acetate ≥ 98.7 %</p> <p>C₄H₆CaO₄ CAS no 62-54-4</p> <p>Water ≤ 6%</p> <p>Non volatile matter ≤ 30 mg/kg</p> <p>Formic acid and its salts and other oxidisable material ≤ 1g/kg</p> <p>Iron ≤ 0.5 mg/kg</p> <p><i>Method of Analysis¹</i></p> <p>For the determination of calcium acetate in feed additive:</p> <p>- titration with sodium edetate (European Pharmacopoeia, monograph 2128)</p> <p>For the determination of calcium acetate as total acetic acid content in premixtures, feedingstuffs:</p> <p>- ion exclusion chromatography with UV and/or refractive index detection (HPLC-UV/RI)</p>	Poultry Pigs Pets	-	-	2 500 (as acetic acid)	<p>1. The mixture of different sources of acetic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Ruminants	-	-			

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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: technological additives. Functional group: preservatives								
1k280	Propionic acid	<p>Additive composition</p> <p>Propionic acid ≥ 99.5 %</p> <p>Liquid form</p> <p>Characterisation of the active substance</p> <p>Propionic acid ≥ 99.5 %</p> <p>C₃H₆O₂ CAS no 79-09-4</p> <p>Non-volatile residue ≤0.01% when dried at 140°C to constant weight</p> <p>Aldehydes ≤0.1% expressed as propanaldehyde</p> <p>Produced by chemical synthesis</p> <p>Method of Analysis¹</p> <p>For the quantification of propionic acid as total propionic acid in feed additive, premixtures, feedingstuffs:</p> <ul style="list-style-type: none"> - ion exclusion High Performance Liquid Chromatography with refractive index or UV detection (HPLC-RI/UV) 	All animal species other than pigs and poultry	-	-	-	<p>1. The mixture of different sources of propionic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	<p><i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i></p>
			Pigs	-	30 000			
			Poultry	-	10 000			

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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: technological additives. Functional group: preservatives								
1k281	Sodium propionate	<p>Additive composition</p> <p>Sodium propionate ≥ 98.5 %</p> <p>Solid form</p> <p>Characterisation of the active substance</p> <p>Sodium propionate ≥ 98.5 %</p> <p>C₃H₅O₂Na CAS no 137-40-6</p> <p>Loss on drying ≤4% determined by drying for two hours at 105°C</p> <p>Produced by chemical synthesis</p> <p>Method of Analysis¹</p> <p>For the quantification of sodium propionate as total propionic acid in feed additive, premixtures, feedingstuffs :</p> <ul style="list-style-type: none"> - ion exclusion High Performance Liquid Chromatography with refractive index or UV detection (HPLC-RI/UV) 	All animal species other than pigs and poultry	-	-	-	<p>1. The mixture of different sources of propionic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Pigs	-	30 000 (as propionic acid)			
			Poultry	-	10 000 (as propionic acid)			

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a282	Calcium propionate	<p>Additive composition</p> <p>Calcium propionate ≥ 98.0% on dry matter basis</p> <p>Solid form</p> <p>Characterisation of the active substance</p> <p>Calcium propionate ≥ 98.0%</p> <p>C₆H₁₀O₄Ca CAS no 4075-81-4</p> <p>Loss on drying ≤6% determined by drying for two hours at 105°C</p> <p>Produced by chemical synthesis</p> <p>Method of Analysis¹</p> <p>For the quantification of calcium propionate as total propionic acid in feed additive, premixtures, feedingstuffs:</p> <ul style="list-style-type: none"> - ion exclusion High Performance Liquid Chromatography with refractive index or UV detection (HPLC-RI/UV) 	All animal species other than pigs and poultry	-	-	-	<p>1. The simultaneous use of calcium propionate with other organic acids at or near the maximum permitted content is not recommended.</p> <p>2. “The mixture of different sources of propionic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>3. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections.</p>	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Pigs	-	30 000 (as propionic acid)			
			Poultry	-	10 000 (as propionic acid)			

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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: technological additives. Functional group: preservatives								
1k284	Ammonium propionate	<p>Additive composition Preparation of ammonium propionate ≥ 19,0 %, propionic acid ≤ 80,0 % and water ≤ 30 %</p> <p>Liquid form</p> <p>Characterisation of the active substance Ammonium propionate contains C₃H₉O₂N CAS no 17496-08-1 Produced by chemical synthesis</p> <p>Method of Analysis¹ For the quantification of the ammonium propionate in the feed additive: - (1) ion exclusion High Performance Liquid Chromatography with refractive index detection (HPLC-RI) – for the determination of total propionate; and (2) titration with sulphuric acid and sodium hydroxide – for the determination of ammonia. For the quantification of ammonium propionate as total propionic acid in feed additive, premixtures, feedingstuffs: - ion exclusion High Performance Liquid Chromatography with refractive index or UV detection (HPLC-RI/UV)</p>	All animal species other than pigs and poultry	-	-	-	<p>1. “The mixture of different sources of propionic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]
			Pigs	-	30 000 (as propionic acid)			
			Poultry	-	10 000 (as propionic acid)			

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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: technological additives. Functional group: preservatives.								
1k236 2b08001	Formic acid	<p>Additive composition</p> <p>Formic acid ≥ 84.5%</p> <p>Liquid form</p> <p>Characterisation of the active substance</p> <p>Formic acid ≥ 84.5%</p> <p>H₂CO₂ CAS no 64-18-6</p> <p>Produced by chemical synthesis</p> <p>Analytical method¹</p> <p>For the determination of formic acid in feed additive, premixtures and feedingstuffs:</p> <ul style="list-style-type: none"> - ion chromatography method equipped with electrical conductivity detection (IC-ECD) or - Ion exclusion high performance liquid chromatography with UV or refractive index detection (HPLC-UV/RI) 	All animal species other than pigs	-		10 000	<p>1. “The mixture of different sources of formic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	<p><i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i></p>
			Pigs			12 000		

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					mg of additive/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives.								
1k237	Sodium formate	<p>Additive composition</p> <p>Sodium formate $\geq 98\%$</p> <p>Solid form</p> <p>Sodium formate $\geq 15\%$</p> <p>Formic acid $\leq 75\%$</p> <p>Water $\leq 25\%$</p> <p>Liquid form</p> <p>Characterisation of the active substance</p> <p>Sodium formate</p> <p>HCO₂Na CAS No.: 141-53-7</p> <p>Produced by chemical synthesis</p> <p>Analytical method¹</p> <p>For the determination of sodium in the feed additives:</p> <ul style="list-style-type: none"> - EN ISO 6869: atomic absorption spectrometry (AAS) or EN 15510: inductively coupled plasma atomic emission spectrometry (ICP-AES) <p>For the determination of total formate in the feed additives:</p> <ul style="list-style-type: none"> - EN 15909: reverse phase HPLC-UV <p>For the determination of total formate in premixtures and feedingstuffs:</p> <ul style="list-style-type: none"> - Ion-exclusion high performance liquid chromatography with UV or refractive index detection (HPLC-UV/RI) or - Ion chromatography method equipped with electrical conductivity detection (IC-ECD) 	All animal species other than pigs	-		10 000 (formic acid equivalent)	<p>1. “The mixture of different sources of formic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	<p><i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i></p>
			Pigs			12 000 (formic acid equivalent)		

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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: technological additives. Functional group: preservatives.								
1a238	Calcium formate	<p>Additive composition</p> <p>Calcium formate ≥ 98 %</p> <p>Solid form</p> <p>Characterisation of the active substance</p> <p>Calcium formate</p> <p>Ca(HCO)₂ CAS No.: 544-17-2</p> <p>Produced by chemical synthesis</p> <p>Analytical method¹</p> <p>For the determination of calcium in the feed additives:</p> <ul style="list-style-type: none"> - EN ISO 6869: atomic absorption spectrometry (AAS) or EN 15510: inductively coupled plasma atomic emission spectrometry (ICP-AES) or EN 15909: complexometrical titration with EDTA. <p>For the determination of total formate in the feed additives:</p> <ul style="list-style-type: none"> - EN 15909: reverse phase HPLC-UV <p>For the determination of total formate in premixtures and feedingstuffs:</p> <ul style="list-style-type: none"> - Ion-exclusion high performance liquid chromatography with UV or refractive index detection (HPLC-UV/RI) or - Ion chromatography method equipped with electrical conductivity detection (IC-ECD) 	All animal species other than pigs	-		10 000 (formic acid equivalent)	<p>1. “The mixture of different sources of formic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	<p><i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i></p>
		Pigs			12 000 (formic acid equivalent)			

¹Details of the analytical methods are available at the following address of the Reference Laboratory: <https://ec.europa.eu/jrc/en/eurl/feed-additives/evaluation-reports>

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: technological additives. Functional group: preservatives.								
1a295	Ammonium formate	<p>Additive composition Ammonium formate \geq 35% Formic acid \leq 64% Liquid form</p> <p>Characterisation of the active substance Ammonium formate \geq 35% HCO₂NH₄ CAS No.: 540-69-2 Formamide < 3000 mg/kg Produced by chemical synthesis</p> <p>Analytical method¹ Determination of total formate in feed additives: EN 15909 reverse phase HPLC-UV. Determination of total formic acid in the premixture, feedstuffs: Ion exclusion high performance liquid chromatography with UV or refractive index detection (HPLC-UV/RI) or Ion chromatography method equipped with electrical conductivity detection (IC-ECD) Determination of ammonium in the feed additive: ISO 5664: distillation and titration, or COM EC R152/2009 – Kjeldahl method.</p>	All animal species other than laying hens, sows, dairy ruminants, pet and not-food producing animals	-		2 000 (formic acid equivalent)	<p>1. “The mixture of different sources of formic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	<i>[to be completed by the OP: insert precise date 10 years from the date of entry into force of this Regulation]</i>

¹Details of the analytical methods are available at the following address of the Reference Laboratory: <https://ec.europa.eu/jrc/en/eurl/feed-additives/evaluation-reports>

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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a270	Lactic acid	<p>Additive composition</p> <p>Lactic acid ≥ 72 % (w/w)</p> <p>Liquid form</p> <p>Characterisation of the active substance</p> <p>Lactic acid:</p> <p>D-lactic ≤ 5 %</p> <p>L-lactic acid ≥ 95 %</p> <p>C₃H₆O₃</p> <p>CAS No 79-33-4</p> <p>Produced by fermentation of:</p> <p><i>Bacillus coagulans</i> (LMG S-26145 or DSM 23965),</p> <p><i>Bacillus smithii</i> (LMG S-27890) or</p> <p><i>Bacillus subtilis</i> (LMG S-27889).</p> <p>Method of Analysis¹</p> <p>For the determination of lactic acid in the feed additive:</p> <p>European Pharmacopoeia Monographs 0458 and the FAO JECFA lactic acid monograph No. 1 (2006)</p> <p>For the determination of the lactic acid in the premixtures, feedingstuffs:</p> <p>ion-exclusion high performance liquid chromatography with UV or refractive index detection (HPLC-UV/RI).</p>	All animal species other than pigs and ruminants	-	-	20 000	<p>1. “The mixture of different sources of lactic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>2. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	<p>[10 years from the date of entry into force of this Regulation</p> <p>To be completed by the OP]</p>
			Pigs and ruminants other than ruminants with a non-functional rumen	-	-	50 000		

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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/kg of complete feedingstuff with a moisture content of 12%			
Category: technological additives. Functional group: preservatives								
1a327	Calcium lactate	<p>Additive composition</p> <p>Calcium lactate ≥ 98 % (as dry matter w/w)</p> <p>Solid form</p> <p>Characterisation of the active substance</p> <p>Calcium lactate ≥ 98 %</p> <p>(C₃H₅O₂)₂ · nH₂O</p> <p>CAS No 814-80-2</p> <p>Produced by chemical synthesis</p> <p>Method of Analysis¹</p> <p>For the determination of calcium lactate in the feed additive:</p> <p>European Pharmacopoeia Monographs (2118; 2117; 0468 and 0469), and the FAO JECFA calcium lactate monograph No. 1 (2006)</p> <p>For the determination of the lactate (expressed as total lactic acid) in the premixtures, feedingstuffs:</p> <p>ion-exclusion high performance liquid chromatography with UV or refractive index detection (HPLC-UV/RI).</p>	All animal species other than pre-ruminants	-	-	24 000 (lactic acid equivalent)	<p>3. “The mixture of different sources of lactic acid shall not exceed the permitted maximum levels in complete feedingstuffs for related species.”</p> <p>4. For users of the additive and premixtures, feed business operators shall establish operational procedures and appropriate organisational measures to address the potential risks resulting from its use. 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 protections</p>	[10 years from the date of entry into force of this Regulation To be completed by the OP]
			Pigs and ruminants other than ruminants with a non-functional rumen			30 000 (lactic acid equivalent)		

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