

updated 01.12.2012

AMMONIA ANHYDROUS: overview of substance life cycle:

Uses	Manufacture	Identified uses			Resulting life cycle stage		Sector of Use (SU)	Product Category used (formulated)	Process category (PROC)	ERC	Technical function (formulated)
		Formulation	Industrial and/or wide dispersive use	Professional use	Consumer use	Service life (for articles)					
1: Manufacture / import - continuous synthesis of substance	x						n.a	n.a	1, 2, 8b,	1	n.a.
2: Manufacture / import -bulk transfer of substance	x						n.a	n.a	1, 8b,	1	n.a.
3: Manufacture / import - laboratory analysis of substance	x						n.a	n.a	15	1	n.a.
4: Distribution of substance		x					n.a	1, 9a, 12, 14, 16, 18, 19, 20, 21, 26, 29, 30, 34, 35, 37, 39, 40	1,2, 8a, 8b, 9, 15,	2	
5: USE of substance to formulate chemical product mixtures		x					n.a.	1, 9a, 12, 14, 16, 18, 19, 20, 21, 26, 29, 30, 34, 35, 37, 39, 40	1, 2, 3, 4, 5, 8a, 8b, 9, 15,	2	Intermediates

Uses	Manufacture	Identified uses			Resulting life cycle stage		Sector of Use (SU)	Product Category used (formulated)	Process category (PROC)	ERC	Technical function (formulated)
		Formulation	Industrial and/or wide dispersive use	Professional use	Consumer use	Service life (for articles)					
6: Industrial USE of substance as chemical intermediate			x				SU1, SU 8, SU 9, SU 24, SU 5, SU 0: Other: C21	19	1, 2, 3, 4, 5, 8b 9, 15,	ERC 6a	Intermediates
7: Industrial Use of substance for flue gas NOx and SOx reduction			x				SU8, SU13 SU23		1, 2, 3, 4, 8b, 9, 19	ERC 6b:	Reducing agents
8: Industrial USE as reactive agent/processing aid and for general chemical applications (e.g. extraction, water treatment/septicity control, pH/neutralising agent)			x				SU 6b, SU 8, SU 9, SU 23,	20, 40, 37,	1, 2, 3, 4,, 8b, 9, 19	ECR 8b	pH-regulating agents, reducing agents, surface active agents, bleaching agents

Uses	Manufacture	Identified uses			Resulting life cycle stage		Sector of Use (SU)	Product Category used (formulated)	Process category (PROC)	ERC	Technical function (formulated)
		Formulation	Industrial and/or wide dispersive use	Professional use	Consumer use	Service life (for articles)					
9: Industrial USE of substance as heat transfer fluid (e.g refrigeration, cooling/heating systems)			x				SU23	16	1, 2, 8b, 9, 19,	ERC 7	Heat transfer agents
10: Industrial USE of substance as chemical/process nutrient (e.g. pharmaceuticals, food, biofuel)			x				SU4, SU9	29	1, 2,8b, 9, 19 3, 4,	ERC4, ERC6b	Pharmaceutical substance
11: Industrial USE of substance, as such or in a mixture, for surface/article treatment (e.g. metal, leather/textiles, plastics, wood, electronics/semiconductors, insulation, hardening, etchant)			x				SU 5, SU6a, SU6b, SU 11, SU 12, SU 15, SU 16	14, 15, 26, 34,	1, 2, 3, 4, 7, 8b, 9, 10, 13,	ERC 5, ERC 6b, ERC4	Surface active agents, Bleaching agents
12: Industrial USE to manufacture specialist chemical/other products (e.g. adhesives, biocides, catalysts, cleaning products, cosmetics, coatings/paints, construction chemicals, corrosion)			x				SU 8, SU 9	1, 9a 39, 35,	1, 2, 3, 4, 5 8b, 9, 10, 19 13, 7	ERC 7, ERC 6b, ERC 5, ERC 4	Processing aid, not otherwise listed
13: Industrial USE as part of specialist chemicals/other products (e.g. photochemical)			x				SU 0: Other: M71	30	2, 3, 4,7, 9	ERC 4 ERC 5 ERC 6b	Photosensitive agents and other photochemicals
14: Professional formulation of mixtures using substance				x			SU 1, SU 8, SU 9, SU 10	12, 19, 20, 21, 40,	1, 2, 3, 5, 8b, 15, 19, 9	ERC 8b, ERC 9a	Fertilisers Intermediates Processing aid, not otherwise listed Surface active agents
15: Professional USE of substance as chemical/process nutrient (e.g. fertiliser, pharmaceuticals, food)				x			SU 1, SU 4	12, 19, 29	2, 8a, 8b, 11, 9, 19	ERC 8b, ERC 8e, ERC 8f ERC 9b	Fertilisers, Intermediates Pharmaceutical substance

Uses	Manufacture	Identified uses			Resulting life cycle stage		Sector of Use (SU)	Product Category used (formulated)	Process category (PROC)	ERC	Technical function (formulated)
		Formulation	Industrial and/or wide dispersive use	Professional use	Consumer use	Service life (for articles)					
16: Professional USE of substance, as such or in a mixture, as reactive agent/processing aid and for general chemical applications (e.g. pH/neutralising agent, water treatment)				x			SU 6b, SU 9, SU 23,	20, 37, 40	1, 2, 3, 4, 8a, 8b, 9, 10, 19	ERC 8b ERC 8e ERC 9a ERC 9b	pH-regulating agents reducing agents Processing aid, not otherwise listed
17: Professional USE of substance as a laboratory/research chemical				x			SU 24	21	2, 3, 4, 9, 15	ERC 8b ERC 8e	Laboratory chemicals
18: Professional USE of substance, as such or in a mixture, as heat transfer fluid (e.g. refrigeration, cooling/heating systems)				x			SU23 SU 0: Other: SU 0: Other: B - Mining and quarrying SU 0: Other: C - Manufacturing SU 0: Other: C28.2 - Manufacture of other general-purpose machinery	16	1, 2,, 8b, 9, 19 20	ERC 9a, ERC 9b	Heat transfer agents
19: Professional USE of substance, as such or in a mixture, for surface/article treatment (e.g. metal, textiles/leather, plastics, wood, etching concrete)				x			SU 5, SU 6a, SU 6b, SU 11, SU 12, SU 15, SU 16,	15, 14, 34	1, 2, 4, 8b, 9, 10, 11, 13,	ERC 8b, ERC 8e	Surface active agents
20: Professional USE as part of specialist chemicals/other products (e.g. biocides, cleaning products, coatings/paints)				x			SU 4 SU 5 SU 6a SU 6b SU 9 SU 17	9a	1, 2, 3,, 4 8a, 9, 10 8b, 10, 13, 19,	ERC 8b ERC 8e	Intermediates Surface active agents Bleaching agents Processing aid, not otherwise listed

Uses	Manufacture	Identified uses			Resulting life cycle stage		Sector of Use (SU)	Product Category used (formulated)	Process category (PROC)	ERC	Technical function (formulated)
		Formulation	Industrial and/or wide dispersive use	Professional use	Consumer use	Service life (for articles)					
21: Professional USE of substance as photochemical				x			SU 0: Other: M71 - Architectural and engineering activities; technical testing and analysis	30	2, 3, 9, 11	ERC 8b, ERC 8e	Photosensitive agents and other photochemicals
22: Consumer USE of substance in cosmetic products (e.g. hair)					x		n.a	39	n.a	ERC 8b	cosmetic
23: Consumer USE of substance as heat transfer fluid (e.g refrigeration, cooling systems)					x		n.a	16	n.a	ERC 9a, ERC 9b	Heat transfer agents
24: Consumer USE of substance as a component in cleaning products					x		n.a	35	n.a.	ERC 8b ERC 8e	Cleanig product
25: Consumer USE of substance as part of specialist products/articles (e.g. coatings/paints/thinners/paint removers)					x		n.a.	9a	n.a.	ERC 8b PC 9a	Surface active agents Reprographic agents (Toners) paint and toners