Safety Data Sheet

According to Regulation (EC) No 1907/2006

Shurlube H VL1

Revision: 2024-08-01 **Version:** 04.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Shurlube H VL1

UFI: 3S62-60F0-X009-JU7F

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use:	Track treatment product. For industrial use only..
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :
AISE_SWED_IS_8b_1
AISE_SWED_IS_4_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@solenis.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, Category 3 (H226)
Skin irritation, Category 2 (H315)
Serious eye damage, Category 1 (H318)
Corrosive to metals, Category 1 (H290)

2.2 Label elements

Signal word: Danger.

Contains fatty acids, C12-18, compds. with ethanolamine (MEA Cocoate), tetrasodium ethylene diamine tetraacetate (Tetrasodium EDTA), Alcohols, C10-16, ethoxylated (7-<15 EO) (C12-15 Pareth-7), 2-aminoethanol (Ethanolamine)

Hazard statements:
H226 - Flammable liquid and vapour.
H290 - May be corrosive to metals.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.

Precautionary statements:
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 - Wear eye or face protection.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE, doctor or physician.

P403 + P235 - Store in a well-ventilated place. Keep cool.

2.3 Other hazards
No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
fatty acids, C12-18, compds. with ethanolamine	292-921-1	91031-21-9	[1]	Serious eye damage, Category 1 (H318)		10-20
Propan-2-ol	200-661-7	67-63-0	01-2119457558-25	Flammable liquids, Category 2 (H225) Specific target organ toxicity - Single exposure, Category 3 (H336) Eye irritation, Category 2 (H319)		3-10
tetrasodium ethylene diamine tetraacetate	200-573-9	64-02-8	01-2119486762-27	Acute toxicity - Oral, Category 4 (H302) Acute toxicity - Inhalation, Category 4 (H332) Specific target organ toxicity - Repeated exposure, Category 2 (H373) Serious eye damage, Category 1 (H318)		3-10
Alcohols, C10-16, ethoxylated (7-<15 EO)	[4]	68002-97-1	[4]	Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		3-10
2-aminoethanol	205-483-3	141-43-5	01-2119486455-28	Skin corrosion, Category 1B (H314) Acute toxicity - Oral, Category 4 (H302) Acute toxicity - Dermal, Category 4 (H312) Acute toxicity - Inhalation, Category 4 (H332) Specific target organ toxicity - Single exposure, Category 3 (H335) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		1-3

Specific concentration limits
2-aminoethanol:
• Specific target organ toxicity - Single exposure, Category 3 (H335) >= 5%

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.
[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.
For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice or attention.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use.

Skin contact: Causes irritation.

Eye contact: Causes severe or permanent damage.

Ingestion: No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No special hazards known.

5.3 Advice for firefighters
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Turn off all sources of ignition. Ventilate the area. Wear eye/face protection. Repeated or prolonged contact:. Wear suitable gloves.

6.2 Environmental precautions
Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up
Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools.
Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.
Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Store in a well-ventilated place. Store in a closed container. Keep only in original packaging. Keep cool. Keep away from heat and direct sunlight.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Comah - Lower Tier requirements (tonnes): 5000
Comah - Upper Tier requirements (tonnes): 50000

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
Propan-2-ol	400 ppm 999 mg/m³	500 ppm 1250 mg/m³
2-aminoethanol	1 ppm 2.5 mg/m³	3 ppm 7.6 mg/m³

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values
Human exposure
DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
fatty acids, C12-18, compds. with ethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	-	-	-	26

tetrasodium ethylene diamine tetraacetate	-	-	-	25
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
2-aminoethanol	-	-	-	1.5

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
fatty acids, C12-18, compds. with ethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	-	-	-	888
tetrasodium ethylene diamine tetraacetate	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-
2-aminoethanol	No data available	-	No data available	3

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
fatty acids, C12-18, compds. with ethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	-	-	-	319
tetrasodium ethylene diamine tetraacetate	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-
2-aminoethanol	No data available	-	No data available	1.5

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
fatty acids, C12-18, compds. with ethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	-	-	-	500
tetrasodium ethylene diamine tetraacetate	3	3	1.5	1.5
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
2-aminoethanol	-	-	0.51	1

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
fatty acids, C12-18, compds. with ethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	-	-	-	89
tetrasodium ethylene diamine tetraacetate	1.2	1.2	0.6	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
2-aminoethanol	-	-	0.28	0.18

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
fatty acids, C12-18, compds. with ethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	140.9	140.9	140.9	2251
tetrasodium ethylene diamine tetraacetate	2.2	0.22	1.2	43
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
2-aminoethanol	0.07	0.007	0.028	100

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
fatty acids, C12-18, compds. with ethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	552	552	28	-
tetrasodium ethylene diamine tetraacetate	-	-	0.72	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
2-aminoethanol	0.375	0.0357	1.29	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin

contact, the personal protection equipment as described in this section is not required.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic transfer and dilution	AISE_SWED_IS_8b_1	IS	PROC 8b	60	ERC4

Personal protective equipment
Eye / face protection: Safety glasses or goggles (EN 16321 / EN 166).
Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary. Repeated or prolonged contact: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 2

Appropriate engineering controls: Provide a good standard of general ventilation.
Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated system	AISE_SWED_IS_4_1	IS	PROC 4	480	ERC8a

Personal protective equipment
Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical state: Liquid
Colour: Clear , Yellow
Odour: Product specific
Odour threshold: Not applicable
Melting point/freezing point (°C): Not determined — Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined — See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
fatty acids, C12-18, compds. with ethanolamine	No data available		
Propan-2-ol	82	Method not given	1013
tetrasodium ethylene diamine tetraacetate	No data available	Non-experimental data	
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		
2-aminoethanol	169-171	Method not given	1013

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Flammable.
Flash point (°C): ≈ 33 °C closed cup
Sustained combustion: Not applicable.
(UN Manual of Tests and Criteria, section 32, L.2)
Lower and upper explosion limit/flammability limit (%): Not determined See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
Propan-2-ol	2	13
2-aminoethanol	3.4	27

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: ≈ 10 (neat) ISO 4316
Dilution pH: ≈ 11 (2 %) ISO 4316
Kinematic viscosity: Not determined
Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
fatty acids, C12-18, compds. with ethanolamine	No data available		
Propan-2-ol	Soluble	Method not given	
tetrasodium ethylene diamine tetraacetate	500	Method not given	20
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		
2-aminoethanol	1000	Method not given	20

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Method / remark

Vapour pressure: Not determined See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
fatty acids, C12-18, compds. with ethanolamine	No data available		
Propan-2-ol	4200	Method not given	20
tetrasodium ethylene diamine tetraacetate	0.0000000002	Read across	25
Alcohols, C10-16, ethoxylated (7-<15 EO)	< 0.15		20
2-aminoethanol	50	Method not given	20

Method / remark

Relative density: ≈ 1.04 (20 °C) OECD 109 (EU A.3)
Relative vapour density: No data available. Not relevant to classification of this product
Particle characteristics: No data available. Not applicable to liquids.

9.2 Other information
9.2.1 Information with regard to physical hazard classes
Explosive properties: Not explosive. Vapours may form explosive mixtures with air.
Oxidising properties: Not oxidising.
Corrosion to metals: Corrosive

9.2.2 Other safety characteristics
No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
May be corrosive to metals.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixture data: .

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000
ATE - Dermal (mg/kg): >2000
ATE - Inhalatory, mists (mg/l): >5
ATE - Inhalatory, vapours (mg/l): >20

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Oral (mg/kg)
fatty acids, C12-18, compds. with ethanolamine	LD_{50}	> 2000		Method not given		Not established
Propan-2-ol	LD_{50}	5840	Rat	OECD 401 (EU B.1)		5840
tetrasodium ethylene diamine tetraacetate	LD_{50}	1780	Rat	OECD 401 (EU B.1)		1780
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD_{50}	300-2000	Rat	Weight of evidence		1000
2-aminoethanol	LD_{50}	1089	Rat	OECD 401 (EU B.1)		1089

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
fatty acids, C12-18, compds. with ethanolamine	LD_{50}	> 2000		Method not given		Not established
Propan-2-ol	LD_{50}	> 2000	Rabbit	Method not given		Not established
tetrasodium ethylene diamine tetraacetate	LD_{50}	> 5000	Rabbit	Method not given		Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD_{50}	> 2000		Method not given		Not established
2-aminoethanol	LD_{50}	2504	Rabbit	OECD 402 (EU B.3)		2504

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
fatty acids, C12-18, compds. with ethanolamine		No data available			
Propan-2-ol	LC_{50}	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
tetrasodium ethylene diamine tetraacetate	LC_{50}	≥ 1-5 (dust)	Rat	OECD 403 (EU B.2)	6
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			
2-aminoethanol	LC_{50}	> 1.4 No mortality observed	Rat	Method not given	4

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
fatty acids, C12-18, compds. with ethanolamine	Not established	Not established	Not established	Not established
Propan-2-ol	Not established	Not established	Not established	Not established
tetrasodium ethylene diamine tetraacetate	Not established	Not established	Not established	Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not established	Not established	Not established	Not established
2-aminoethanol	Not established	Not established	Not established	Not established

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
fatty acids, C12-18, compds. with ethanolamine	No data available			
Propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	
tetrasodium ethylene diamine tetraacetate	Not irritant	Rabbit	OECD 404 (EU B.4)	

Alcohols, C10-16, ethoxylated (7-<15 EO)	Not irritant	Rabbit	Method not given	
2-aminoethanol	Corrosive	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
fatty acids, C12-18, compds. with ethanolamine	No data available			
Propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	
tetrasodium ethylene diamine tetraacetate	Severe damage		Method not given	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Severe damage	Rabbit	Method not given	
2-aminoethanol	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
fatty acids, C12-18, compds. with ethanolamine	No data available			
Propan-2-ol	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available			
2-aminoethanol	Irritating to respiratory tract		Method not given	

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
fatty acids, C12-18, compds. with ethanolamine	No data available			
Propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
tetrasodium ethylene diamine tetraacetate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not sensitising	Guinea pig	Method not given	
2-aminoethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
fatty acids, C12-18, compds. with ethanolamine	No data available			
Propan-2-ol	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available			
2-aminoethanol	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
fatty acids, C12-18, compds. with ethanolamine	No data available		No data available	
Propan-2-ol	No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
tetrasodium ethylene diamine tetraacetate	No evidence for mutagenicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	Method not given
2-aminoethanol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476 (Mouse lymphoma)	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
fatty acids, C12-18, compds. with ethanolamine	No data available
Propan-2-ol	No evidence for carcinogenicity, negative test results
tetrasodium ethylene diamine tetraacetate	No evidence for carcinogenicity, weight-of-evidence
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for carcinogenicity, weight-of-evidence
2-aminoethanol	No evidence for carcinogenicity, weight-of-evidence

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value	Species	Method	Exposure	Remarks and other effects

			(mg/kg bw/d)			time	reported
fatty acids, C12-18, compds. with ethanolamine			No data available				
Propan-2-ol			No data available				
tetrasodium ethylene diamine tetraacetate			No data available				No evidence for reproductive toxicity
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available		Literature		No evidence for teratogenic effects No evidence for reproductive toxicity
2-aminoethanol	NOAEL	Developmental toxicity	> 75	Rabbit	OECD 414 (EU B.31), oral	6 - 15 day(s)	No evidence for developmental toxicity No evidence for reproductive toxicity

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
fatty acids, C12-18, compds. with ethanolamine		No data available				
Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
2-aminoethanol	NOAEL	300	Rat		75	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
fatty acids, C12-18, compds. with ethanolamine		No data available				
Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
2-aminoethanol		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
fatty acids, C12-18, compds. with ethanolamine		No data available				
Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
2-aminoethanol		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
fatty acids, C12-18, compds. with ethanolamine			No data available					
Propan-2-ol			No data available					
tetrasodium ethylene diamine tetraacetate			No data available					
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available					
2-aminoethanol			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
fatty acids, C12-18, compds. with ethanolamine	No data available
Propan-2-ol	Central nervous system
tetrasodium ethylene diamine tetraacetate	No data available

Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available
2-aminoethanol	Respiratory tract

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
fatty acids, C12-18, compds. with ethanolamine	No data available
Propan-2-ol	No data available
tetrasodium ethylene diamine tetraacetate	Respiratory tract
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available
2-aminoethanol	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties
Endocrine disrupting properties - Human data, if available:

11.2.2 Other information
No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture .

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
fatty acids, C12-18, compds. with ethanolamine		No data available			
Propan-2-ol	LC_{50}	> 100	*Pimephales promelas*	Method not given	48
tetrasodium ethylene diamine tetraacetate	LC_{50}	> 100	*Lepomis macrochirus*	OPP 72-1, static (EPA)	96
Alcohols, C10-16, ethoxylated (7-<15 EO)	LC_{50}	> 1-10	*Brachydanio rerio*	Method not given	96
2-aminoethanol	LC_{50}	349	*Cyprinus carpio*	OECD 203, semi-static	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
fatty acids, C12-18, compds. with ethanolamine		No data available			
Propan-2-ol	EC_{50}	> 100	*Daphnia magna Straus*	Method not given	48
tetrasodium ethylene diamine tetraacetate	EC_{50}	140	*Daphnia magna Straus*	DIN 38412, Part 11	48
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC_{50}	> 1-10	*Daphnia magna Straus*	Method not given	48
2-aminoethanol	EC_{50}	27.04	*Daphnia magna Straus*	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
fatty acids, C12-18, compds. with ethanolamine		No data available			
Propan-2-ol	EC_{50}	> 100	*Scenedesmus quadricauda*	Method not given	72
tetrasodium ethylene diamine tetraacetate	EC_{50}	> 100	*Scenedesmus obliquus*	88/302/EEC, Part C, static	72
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC_{50}	> 1-10	*Desmodesmus subspicatus*	Method not given	72
2-aminoethanol	EC_{50}	2.8	*Selenastrum capricornutum*	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
fatty acids, C12-18, compds. with ethanolamine		No data available			
Propan-2-ol		No data available			
tetrasodium ethylene diamine tetraacetate		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			
2-aminoethanol		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
fatty acids, C12-18, compds. with ethanolamine		No data available			
Propan-2-ol	EC_{50}	> 1000	*Activated sludge*	Method not given	
tetrasodium ethylene diamine tetraacetate	EC_{20}	> 500	*Activated sludge*	OECD 209	0.5 hour(s)
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC_{50}	140	*Activated sludge*	Method not given	
2-aminoethanol	EC_{50}	> 1000	*Activated sludge*	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
fatty acids, C12-18, compds. with ethanolamine		No data available				
Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate	NOEC	> 25.7	*Brachydanio rerio*	OECD 210	35 day(s)	
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
2-aminoethanol	NOEC	1.2	*Oryzias latipes*	OECD 210	30 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
fatty acids, C12-18, compds. with ethanolamine		No data available				
Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate	NOEC	25	*Daphnia magna*	OECD 211	21 day(s)	
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC_{10}	> 0.1-1	*Daphnia sp.*	OECD 211		
2-aminoethanol	NOEC	0.85	*Daphnia magna*	OECD 202	21 day(s)	

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
fatty acids, C12-18, compds. with ethanolamine		No data available				
Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
2-aminoethanol		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed

Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate	LD_{50}	156	*Eisenia fetida*	OECD 207	14	
2-aminoethanol		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data available				
tetrasodium ethylene diamine tetraacetate	NOEC	0.25 - 1.25			21	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data available				
2-aminoethanol		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data available				
2-aminoethanol		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data available				
2-aminoethanol		No data available				

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
Propan-2-ol	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
Propan-2-ol	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
Propan-2-ol		No data available			
tetrasodium ethylene diamine tetraacetate		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
fatty acids, C12-18, compds. with ethanolamine	Adapted activated sludge		> 90% in 28 day(s)		Readily biodegradable
Propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable
tetrasodium ethylene diamine tetraacetate				Weight of evidence	Not readily biodegradable.
Alcohols, C10-16, ethoxylated (7-<15 EO)	Activated sludge, aerobe	Method not given	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
2-aminoethanol		DOC reduction	> 90 % in 21 day(s)	OECD 301A	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Propan-2-ol					No data available
tetrasodium ethylene diamine tetraacetate					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Propan-2-ol					No data available
tetrasodium ethylene diamine tetraacetate					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
fatty acids, C12-18, compds. with ethanolamine	No data available			
Propan-2-ol	0.05	OECD 107	No bioaccumulation expected	
tetrasodium ethylene diamine tetraacetate	-3.86	Method not given	No bioaccumulation expected	
Alcohols, C10-16, ethoxylated (7-<15 EO)	3.55	QSAR	No bioaccumulation expected	
2-aminoethanol	- 1.91	OECD 107	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
fatty acids, C12-18, compds. with ethanolamine	No data available				
Propan-2-ol	No data available				
tetrasodium ethylene diamine tetraacetate	1.8	*Lepomis macrochirus*	OECD 305	Low potential for bioaccumulation	
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available				
2-aminoethanol	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
fatty acids, C12-18, compds. with ethanolamine	No data available				
Propan-2-ol	No data available				Potential for mobility in soil, soluble in water
tetrasodium ethylene diamine tetraacetate	No data available				Adsorption to solid soil phase is not expected
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available				
2-aminoethanol	0.067		Model calculation		Potential for mobility in soil, soluble in water Adsorption to solid soil phase is not expected

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue: 16 03 05* - organic wastes containing dangerous substances.

Empty packaging Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number: 2924

14.2 UN proper shipping name:

Flammable liquid, corrosive, n.o.s. (tetrasodium ethylenediaminetetraacetate , isopropanol)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 3(8)

14.4 Packing group: III

14.5 Environmental hazards:

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Maritime transport in bulk according to IMO instruments: The product is not transported in bulk tankers.

Other relevant information:

ADR

Classification code: FC

Tunnel restriction code: (D/E)

Hazard identification number: 38

IMO/IMDG

EmS: F-E, S-C

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code
Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations :

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Comah - classification: P5c - FLAMMABLE LIQUIDS

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS1002186 **Version:** 04.0 **Revision:** 2024-08-01

Reason for revision:

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 1, 3, 4, 6, 8, 9, 11, 12, 15, 16

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11

for toxicological information and section 12 for ecological information.

Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- H225 - Highly flammable liquid and vapour.
- H226 - Flammable liquid and vapour.
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H332 - Harmful if inhaled.
- H335 - May cause respiratory irritation.
- H336 - May cause drowsiness or dizziness.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H412 - Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet