Safety Data Sheet

According to Regulation (EC) No 1907/2006

5XD CONCENTRATED DEGREASER

Revision: 2022-10-07 **Version:** 01.0

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

1.1 Product identifier
Trade name: 5XD CONCENTRATED DEGREASER

UFI: HSVH-W1AC-H00E-F64H

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

Product use:	Kitchen surface cleaner. For professional use only.
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :
AISE_SWED_PW_8a_1
AISE_SWED_PW_8b_1
AISE_SWED_PW_10_1
AISE_SWED_PW_11_1
AISE_SWED_PW_19_1

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, 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@diversey.com

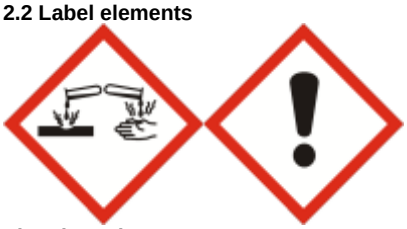
1.4 Emergency telephone number
Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Corr. 1B (H314)
STOT SE 3 (H335)
Eye Dam. 1 (H318)
Aquatic Chronic 3 (H412)

2.2 Label elements



Signal word: Danger.

Contains amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl) (Cocamide DEA), 2-aminoethanol (Ethanolamine), sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (Sodium C14-16 Olefin Sulfonate)

Hazard statements:
H314 - Causes severe skin burns and eye damage.
H335 - May cause respiratory irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P260 - Do not breathe vapours.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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.

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
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	931-329-6	-	01-2119490100-53	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)		3-10
2-aminoethanol	205-483-3	141-43-5	01-2119486455-28	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) STOT SE 3 (H335) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		3-10
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	931-534-0	-	01-2119513401-57	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		3-10
(2-methoxymethylethoxy)propanol	252-104-2	34590-94-8	01-2119450011-60	Not classified as hazardous		3-10
tetrasodium (1-hydroxy ethylidene)bisphosphonate	223-267-7	3794-83-0	[1]	Acute Tox. 4 (H302) Eye Irrit. 2 (H319)		1-3

Specific concentration limits
2-aminoethanol:
• STOT SE 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.
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

General Information: Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE, doctor or physician if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. 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. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

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: May cause respiratory irritation.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

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
Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

6.2 Environmental precautions
Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up
Ensure adequate ventilation. Dyke to collect large liquid spills. Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). 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:
No special precautions required.
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. Do not breathe vapours. Do not breathe spray. Use only outdoors or in a well-ventilated area. 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 closed container. Keep only in original packaging. Keep away from heat and direct sunlight.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

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)
2-aminoethanol	1 ppm 2.5 mg/m³	3 ppm 7.6 mg/m³
(2-methoxymethylethoxy)propanol	50 ppm 308 mg/m³	150 ppm 924 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
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	-	-	-	6.25
2-aminoethanol	-	-	-	1.5
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	-	-	-	12.95
(2-methoxymethylethoxy)propanol	-	-	-	36
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	2.4

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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	-	-	0.09 mg/cm^2 skin	4.16
2-aminoethanol	No data available	-	No data available	3
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available	-	No data available	2158.33
(2-methoxymethylethoxy)propanol	No data available	-	No data available	283
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available	-	No data available	48

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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	No data available	-	0.056 mg/cm^2 skin	2.5
2-aminoethanol	No data available	-	No data available	1.5
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available	-	No data available	1295
(2-methoxymethylethoxy)propanol	No data available	-	No data available	15
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available	-	No data available	24

DNEL/DMEL inhalatory exposure - Worker (mg/m^3)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	-	-	-	73.4
2-aminoethanol	-	-	0.51	1
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	-	-	-	152.22
(2-methoxymethylethoxy)propanol	-	-	-	308
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	16.9

DNEL/DMEL inhalatory exposure - Consumer (mg/m^3)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	-	-	-	21.73
2-aminoethanol	-	-	0.28	0.18
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	-	-	-	45.04
(2-methoxymethylethoxy)propanol	-	-	-	37.2
tetrasodium (1-hydroxy ethylidene)bisphosphonate	10	-	10	4.2

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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	0.007	0.0007	0.024	830
2-aminoethanol	0.07	0.007	0.028	100
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	0.024	0.0024	0.0197	4
(2-methoxymethylethoxy)propanol	19	1.9	190	4168
tetrasodium (1-hydroxy ethylidene)bisphosphonate	0.096	0.01	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	0.0424	-	0.0189	-
2-aminoethanol	0.375	0.0357	1.29	-
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	0.767	0.0767	1.21	-
(2-methoxymethylethoxy)propanol	70.2	7.02	2.74	190
tetrasodium (1-hydroxy ethylidene)bisphosphonate	193	19.3	14	-

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
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a
Automatic transfer and dilution	AISE_SWED_PW_8b_1	PW	PROC 8b	60	ERC8b

Personal protective equipment
Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.
Hand protection: 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: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
Respiratory protection: If exposure to liquid particles or splashes cannot be avoided use: half mask (EN 140) with particle filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. Specific applications tools may be available to limit exposure. Please refer to the product information sheet for the possibilities. Apply technical measures to comply with the occupational exposure limits, if available.

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): 10

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
Manual application by brushing, wiping or mopping	AISE_SWED_PW_10_1	PW	PROC 10	480	ERC8a
Spray application	AISE_SWED_PW_11_1	PW	PROC 11	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	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: Trigger spray bottle application: No special requirements under normal use conditions. Apply technical measures to comply with the occupational exposure limits, if available.

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 , Orange	
Odour: Citrus	
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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	> 100	Method not given	
2-aminoethanol	169-171	Method not given	1013
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available		
(2-methoxymethylethoxy)propanol	189.6	Method not given	1013
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available		

	Method / remark
Flammability (solid, gas): Not applicable to liquids	
Flammability (liquid): Not flammable.	
Flash point (°C): Not applicable.	
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)
2-aminoethanol	3.4	27
(2-methoxymethylethoxy)propanol	1.1	14

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH: >= 11.5 (neat)	ISO 4316
Dilution pH: > 11 (10 %)	ISO 4316
Kinematic viscosity: ≈ 45 mPa.s (20 °C)	
Solubility in / Miscibility with water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	0.015-0.030	Method not given	20
2-aminoethanol	1000	Method not given	20
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Soluble	Method not given	20
(2-methoxymethylethoxy)propanol	Soluble	Method not given	20
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available		

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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	0.00014	Method not given	20
2-aminoethanol	50	Method not given	20
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	< 0.001	Method not given	25
(2-methoxymethylethoxy)propanol	5500	Method not given	20
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available		

	Method / remark
Relative density: ≈ 1.02 (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.
Oxidising properties: Not oxidising.
Corrosion to metals: Not 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
Reacts with acids.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000
ATE - Dermal (mg/kg): >2000
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 (mg/kg)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	LD_{50}	> 2000	Rat	OECD 401 (EU B.1)		Not established
2-aminoethanol	LD_{50}	1089	Rat	OECD 401 (EU B.1)		18000
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LD_{50}	> 2000	Rat	OECD 401 (EU B.1)		Not established
(2-methoxymethylethoxy)propanol	LD_{50}	> 5000	Rat	OECD 401 (EU B.1)		Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate	LD_{50}	2850	Rat	OECD 401 (EU B.1)		240000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	LD_{50}	> 2000	Rabbit	Method not given		Not established
2-aminoethanol	LD_{50}	2504	Rabbit	OECD 402 (EU B.3)		18000
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LD_{50}	6300	Rabbit	OECD 402 (EU B.3)		Not established

(2-methoxymethylethoxy)propanol	LD_{50}	9510	Rabbit	Method not given		Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate	LD_{50}	> 5000	Rabbit	OECD 402 (EU B.3)		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)		No data available			
2-aminoethanol	LC_{50}	> 1.4 No mortality observed	Rat	Method not given	4
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LC_{50}	> 52 (mist)	Rat	OECD 403 (EU B.2)	4
(2-methoxymethylethoxy)propanol	LC_{0}	> 1.667 (vapour) No mortality observed	Rat		7
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	Not established	Not established	Not established	Not established
2-aminoethanol	Not established	Not established	120	Not established
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Not established	Not established	Not established	Not established
(2-methoxymethylethoxy)propanol	Not established	Not established	Not established	Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	Irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)
2-aminoethanol	Corrosive	Rabbit	OECD 404 (EU B.4)	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	
(2-methoxymethylethoxy)propanol	Not irritant		Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	Severe damage	Rabbit	OECD 405 (EU B.5)	
2-aminoethanol	Severe damage	Rabbit	OECD 405 (EU B.5)	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	
(2-methoxymethylethoxy)propanol	Not corrosive or irritant		Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	No data available			
2-aminoethanol	Irritating to respiratory tract		Method not given	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available			
(2-methoxymethylethoxy)propanol	No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
2-aminoethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
(2-methoxymethylethoxy)propanol	Not sensitising		Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time

amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	No data available			
2-aminoethanol	No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available			
(2-methoxymethylethoxy)propanol	No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate	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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
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)
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	Method not given
(2-methoxymethylethoxy)propanol	No evidence for mutagenicity, negative test results	Method not given	No data available	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No evidence for mutagenicity, negative test results	draft OECD 487	No evidence of genotoxicity, negative test results	OECD 478

Carcinogenicity

Ingredient(s)	Effect
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	No evidence for carcinogenicity, negative test results
2-aminoethanol	No evidence for carcinogenicity, weight-of-evidence
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No evidence for carcinogenicity, negative test results
(2-methoxymethylethoxy)propanol	No evidence for carcinogenicity, negative test results
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	NOAEL	Teratogenic effects Maternal toxicity	> 1000	Rat	OECD 414 (EU B.31), oral		
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
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts			No data available				No evidence for teratogenic effects
(2-methoxymethylethoxy)propanol			No data available				No evidence for reproductive toxicity
tetrasodium (1-hydroxy ethylidene)bisphosphonate	NOAEL		112	Rat	OECD 416, (EU B.35), oral		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
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	NOAEL	> 750	Rat	OECD 407 (EU B.7)	28	
2-aminoethanol	NOAEL	300	Rat		75	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
(2-methoxymethylethoxy)propanol		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate	NOAEL	41	Rat	OECD 408 (EU B.26)	90	No effects observed

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	NOEL	50	Rat	Method not given	90	
2-aminoethanol		No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				

(2-methoxymethylethoxy)propanol		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		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
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)		No data available				
2-aminoethanol		No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
(2-methoxymethylethoxy)propanol		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		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
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	Oral	NOEL	> 50	Rat	Method not given	90 day(s)		
2-aminoethanol			No data available					
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Oral	NOAEL	259	Rat	Method not given	24 month(s)		
(2-methoxymethylethoxy)propanol			No data available					
tetrasodium (1-hydroxy ethylidene)bisphosphonate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	No data available
2-aminoethanol	Respiratory tract
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available
(2-methoxymethylethoxy)propanol	No data available
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	No data available
2-aminoethanol	No data available
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available
(2-methoxymethylethoxy)propanol	No data available
tetrasodium (1-hydroxy ethylidene)bisphosphonate	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)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	LC_{50}	2.4	*Oncorhynchus mykiss*	OECD 203, semi-static	96
2-aminoethanol	LC_{50}	349	*Cyprinus carpio*	OECD 203, semi-static	96
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LC_{50}	4.2	*Brachydanio rerio*	OECD 203 (EU C.1)	96
(2-methoxymethylethoxy)propanol	LC_{50}	> 1000	*Poecilia reticulata*	Method not given	96
tetrasodium (1-hydroxy ethylidene)bisphosphonate	LC_{50}	195			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	EC_{50}	3.2	*Daphnia magna Straus*	OECD 202, static	48
2-aminoethanol	EC_{50}	27.04	*Daphnia magna Straus*	OECD 202, static	48
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	EC_{50}	4.53	*Ceriodaphnia sp.*	OECD 202 (EU C.2)	48
(2-methoxymethylethoxy)propanol	EC_{50}	1919	*Daphnia magna Straus*	Method not given	48
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	$E_r C_{50}$	3.9	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
2-aminoethanol	EC_{50}	2.8	*Selenastrum capricornutum*	OECD 201 (EU C.3)	72
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	EC_{50}	5.2		OECD 201 (EU C.3)	72
(2-methoxymethylethoxy)propanol	EC_{50}	> 969	*Selenastrum capricornutum*	Method not given	72
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)		No data available			
2-aminoethanol		No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available			
(2-methoxymethylethoxy)propanol		No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	EC_{50}	> 1000		Method not given	0.5 hour(s)
2-aminoethanol	EC_{50}	> 1000	*Activated sludge*	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	EC_{50}	230		OECD 209	
(2-methoxymethylethoxy)propanol	EC_{10}	4168	*Pseudomonas putida*	Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	NOEC	1	*Oncorhynchus mykiss*	OECD 203	96 hour(s)	

2-aminoethanol	NOEC	1.2	*Oryzias latipes*	OECD 210	30 day(s)	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
(2-methoxymethylethoxy)propanol		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	NOEC	1	*Daphnia magna*	OECD 202	48 hour(s)	
2-aminoethanol	NOEC	0.85	*Daphnia magna*	OECD 202	21 day(s)	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
(2-methoxymethylethoxy)propanol	NOEC	> 0.5	*Daphnia magna*	Method not given	22 day(s)	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	NOEC	6.75	*Daphnia magna*		28 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
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)		No data available				
2-aminoethanol		No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
(2-methoxymethylethoxy)propanol		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		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
2-aminoethanol		No data available				

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
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
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
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
(2-methoxymethylethoxy)propanol	< 1 day(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)			> 60 % in 28 day(s)	OECD 301D	Readily biodegradable
2-aminoethanol		DOC reduction	> 90 % in 21 day(s)	OECD 301A	Readily biodegradable
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Activated sludge, aerobe	CO_2 production	> 80 % in 28 day(s)	OECD 301B	Readily biodegradable
(2-methoxymethylethoxy)propanol		Oxygen depletion	75 % in 28 day(s)	OECD 301F	Readily biodegradable
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Activated sludge, aerobe			Read across	Not readily biodegradable.

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	3.52	Method not given	Low potential for bioaccumulation	
2-aminoethanol	- 1.91	OECD 107	No bioaccumulation expected	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	-1.3	(EC) 440/2008, A.8	No bioaccumulation expected	
(2-methoxymethylethoxy)propanol	1.01	Method not given	Low potential for bioaccumulation	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	65.36		Method not given	Low potential for bioaccumulation	
2-aminoethanol	No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available				
(2-methoxymethylethoxy)propanol	No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate	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
amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	241				
2-aminoethanol	0.067		Model calculation		Potential for mobility in soil, soluble in water Adsorption to solid soil phase is not expected
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available				Low potential for adsorption to soil
(2-methoxymethylethoxy)propanol	No data available				High potential for mobility in soil
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available				

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: 20 01 15* - alkalines.

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: 2491

14.2 UN proper shipping name:
Ethanolamine solution

14.3 Transport hazard class(es):
Transport hazard class (and subsidiary risks): 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 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR
Classification code: C7
Tunnel restriction code: E
Hazard identification number: 80

IMO/IMDG
EmS: F-A, S-B

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)
- Regulation (EC) 648/2004 - Detergents regulation (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.

Ingredients according to Detergents Regulation

anionic surfactants, phosphonates	< 5 %
perfumes , 2-Bromo-2-Nitropropane-1,3-Diol	

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made

available to them, at their direct request or at the request of a detergent manufacturer.

Comah - classification: Not classified

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

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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.

Full text of the H and EUH phrases mentioned in section 3:
• H302 - Harmful if swallowed.
• H312 - Harmful in contact with skin.
• H315 - Causes skin irritation.
• H318 - Causes serious eye damage.
• H319 - Causes serious eye irritation.
• H332 - Harmful if inhaled.
• H335 - May cause respiratory irritation.
• H411 - Toxic to aquatic life with long lasting effects.
• H412 - Harmful to aquatic life with long lasting effects.

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

End of Safety Data Sheet