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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

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

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

Koch-Chemie GmbH Einsteinstrasse 42 59423 Unna Telefon: +49 (0) 2303 / 9 86 70 - 0 Fax: +49 (0) 2303 / 9 86 70 - 26 info@koch-chemie.com www.koch-chemie.com

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number Emergency information services / official advisory body:

(RL

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland, Tel.: +353 (0)1 809 2166 (Public Poisons Info Line, 8am-10pm, 7 days a week) +353 (0)1 809 2566 (Info for Healthcare Professionals ONLY, 24 h, 7 days a week)

Telephone number of the company in case of emergencies:

+1 872 5888271 (KCC)

SECTION 2: Hazards identification

	f the substance or mixtur rding to Regulation (EC)	
Hazard class	Hazard category	Hazard statement
STOT SE	3	H335-May cause respiratory irritation.
Skin Irrit.	2	H315-Causes skin irritation.
Eye Dam.	1	H318-Causes serious eye damage.
Met. Corr.	1	H290-May be corrosive to metals.

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)

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H335-May cause respiratory irritation. H315-Causes skin irritation. H318-Causes serious eye damage. H290-May be corrosive to metals.

P261-Avoid breathing vapours or spray. P280-Wear protective gloves / eye protection / 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 CENTER / doctor. P390-Absorb spillage to prevent material damage. P403+P233-Store in a well-ventilated place. Keep container tightly closed.

Sodium hydroxide Alcohols, C12-14, ethoxylated, sulfates, sodium salts Ethanolamine 2-Propylheptanol, ethoxylated

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances

n.a. 3.2 Mixtures

01-2119489411-37-XXXX	
239-854-6	
15763-76-5	
5-<10	
Eye Irrit. 2, H319	
	239-854-6 15763-76-5 5-<10

Ethanolamine	Substance for which an EU exposure limit value
	applies.
Registration number (REACH)	01-2119486455-28-XXXX
Index	603-030-00-8
EINECS, ELINCS, NLP, REACH-IT List-No.	205-483-3
CAS	141-43-5
content %	5-<10

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Classification according to Regulation (EC) 1272/2008 (CLP), M-	Acute Tox. 4. H302
factors	Acute Tox. 4, H302 Acute Tox. 4, H312
lacions	Acute Tox. 4, H312 Acute Tox. 4, H332
	Skin Corr. 1B, H314
	Eye Dam. 1, H318
	Aquatic Chronic 3, H412
Specific Concentration Limits and ATE	STOT SE 3, H335: >=5 %
·	
2-Propylheptanol, ethoxylated	
Registration number (REACH)	
EINECS, ELINCS, NLP, REACH-IT List-No.	
CAS content %	160875-66-1
Classification according to Regulation (EC) 1272/2008 (CLP), M-	1-<10 Acute Tox. 4, H302
classification according to Regulation (EC) 1272/2008 (CLP), M- factors	Acute Tox. 4, H302 Eye Dam. 1, H318
Specific Concentration Limits and ATE	Eye Dam. 1, H318 Eye Dam. 1, H318: >10 %
Specific Concentration Limits and ATE	Eye Dam. 1, 11510. 210 /0
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	
Registration number (REACH)	01-2119488639-16-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	500-234-8
CAS	68891-38-3
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Skin Irrit. 2, H315
factors	Eye Dam. 1, H318
	Aquatic Chronic 3, H412
Specific Concentration Limits and ATE	Eye Dam. 1, H318: >=10 %
	Eye Irrit. 2, H319: >=5 %
Sodium hydroxide	
Registration number (REACH)	01-2119457892-27-XXXX
Index	011-002-00-6
EINECS, ELINCS, NLP, REACH-IT List-No.	215-185-5
CAS	1310-73-2
content %	0,5-<2
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Met. Corr. 1, H290
factors	Skin Corr. 1A, H314
	Eye Dam. 1, H318
	Skin Corr. 1A, H314: >=5 %
Specific Concentration Limits and ATE	
Specific Concentration Limits and ATE	Skin Corr. 1B, H314: >=2 %
Specific Concentration Limits and ATE	

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area. Supply person with fresh air and consult doctor according to symptoms. **Skin contact**

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Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye contact

Remove contact lenses. Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available. Protect uninjured eye. Follow-up examination by an ophthalmologist.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. coughing eyes, reddened watering eyes irritation of the eyes reddening of the skin Dermatitis (skin inflammation) **4.3 Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Oxides of nitrogen Oxides of sulphur Toxic gases

5.3 Advice for firefighters

For personal protective equipment see Section 8. In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination. Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Keep unprotected persons away.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

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6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system. If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13. Fill the absorbed material into lockable containers.

Neutralising is possible (only from a specialist).

Diluting with water is possible.

Flush residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals. Not to be stored in gangways or stair wells. Store product closed and only in original packing. Do not use alkali sensitive materials. Do not store with acids. Store in a well ventilated place. Store cool. Store in a dry place. **7.3 Specific end use(s)**

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Ethanolamine	
WEL-TWA: 1 ppm (2,5 mg/m3)	(WEL-TWA, EU)	WEL-STEL: 3 ppm (7,6 mg/m3) (WEL-STEL, EU)
Monitoring procedures:	-	Compur - KITA-224 SA (548 634)
	-	NIOSH 2007 (Aminoethanol compounds) - 1994
	-	NIOSH 3509 (Aminoethanol COMPOUNDS II) - 1994
		OSHA PV2111 (Ethanolamine) - 1988 - EU project BC/CEN/ENTR/000/2002-16
	-	card 49-5 (2004)
BMGV:		Other information: Sk (WEL, EU)
Chemical Name	Ethanolamine	

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	m3) (OELV-8h, EU)	EU)		n (7,6 mg/m3) (OEL)	/-15min,		
Monitoring procedures:	-	NIOSH 200 NIOSH 350 OSHA PV2	9 (Aminoetha 111 (Ethanol	(548 634) anol compounds) - 1 anol COMPOUNDS amine) - 1988 - EU j	II) - 1994	/CEN/ENTR/0	00/2002-16
DL1/	-	card 49-5 (2004)	Othersister			1)
BLV:				Other Info	mation:	Sk (IOELV, El	J)
Chemical Name	Ethanolamine						
OELV-8h: 1 ppm (2,5 mg/r	m3) (OELV-8h, UE)			',6 mg/m3) (OELV-S	T, UE)		
Monitoring procedures:	-		(ITA-224 SA				
	-			anol compounds) - 1 anol COMPOUNDS			
	-			amine) - 1988 - EU j			00/2002-16
	-	card 49-5 (2					00/2002-10
BMGV:			2001)	Other info	mation:	Skin	
-	Codium hydrovi	do					
Chemical Name WEL-TWA:	Sodium hydroxi		EL: 2 mg/m	13			
Monitoring procedures:				air - Determination of	metals ar	nd metalloids i	n airborne
filering proceduree.				uctively Coupled Pla			andonno
	-	Spectrome	try), Part 1-3	- 2012(Part 1), 2012	(Part 2), 2	004 (Part 3)	
	-	NIOSH 7401 (Alkaline dusts) - 1994					
		OSHA ID-121 (Metal and metalloid particulates in workplace atmospheres					
			sorption)) - 20	002 - EU project BC/	CEN/ENT	R/000/2002-16	6 card 45-5
BMGV:	-	(2004)		Other info	motion		
-					mation.		
Chemical Name	Sodium hydroxi			/ 0		1	
OELV-8h: Monitoring procedures:			5min: 2 mg/		motolo or		a airharaa
Monitoring procedures.		ISO 15202 (Workplace air - Determination of metals and metalloids in airborne particulate matter by Inductively Coupled Plasma Atomic Emission					
	-			- 2012(Part 1), 2012	(Part 2), 2	004 (Part 3)	
	-		1 (Alkaline d				
				d metalloid particulat 002 - EU project BC/			
	-	(2004)	sorption)) - 20	JUZ - EU project BC/		R/000/2002-10	5 Calu 45-0
BLV:		(2004)		Other info	mation:		
	Nitrilatriathanal						
Chemical Name OELV-8h: 5 mg/m3	Nitrilotriethanol	OELV-1	5min:				
Monitoring procedures:			511111				
BLV:				Other info	mation.		
					mation.		
	Exposure route /	Eff	ect on healtl		Value	Unit	Note
	Exposure route / Environmental	Eff	ect on healtl			Unit	Note
	Exposure route / Environmental compartment		ect on healtl	h Descripto r	Value		Note
	Exposure route / Environmental compartment Environment - freshv	vater	ect on healtl	h Descripto r PNEC	Value 0,23	mg/l	Note
	Exposure route / Environmental compartment Environment - freshv Environment - sporad	vater dic	ect on healtl	h Descripto r	Value		Note
	Exposure route / Environmental compartment Environment - freshv Environment - sporad (intermittent) release	vater dic	ect on healtl	h Descripto r PNEC PNEC	Value 0,23 2,3	mg/l mg/l	Note
	Exposure route / Environmental compartment Environment - freshv Environment - spora (intermittent) release Environment - sewag	vater dic	ect on healtl	h Descripto r PNEC	Value 0,23	mg/l	Note
	Exposure route / Environmental compartment Environment - freshv Environment - spora (intermittent) release Environment - sewag treatment plant	vater dic ge	ect on healtl	h Descripto r PNEC PNEC PNEC PNEC	Value 0,23 2,3 100	mg/l mg/l mg/l	Note
	Exposure route / Environmental compartment Environment - freshv Environment - spora (intermittent) release Environment - sewag	vater dic ge e	ect on healtl	h Descripto r PNEC PNEC	Value 0,23 2,3	mg/l mg/l mg/l mg/l	Note
	Exposure route / Environmental compartment Environment - freshv Environment - spora (intermittent) release Environment - sewag treatment plant Environment - marine Environment - sedim freshwater	vater dic dic ge e eent,	ect on healtl	h Descripto r PNEC PNEC PNEC PNEC PNEC PNEC	Value 0,23 2,3 100 0,023 0,862	mg/l mg/l mg/l mg/l mg/kg dw	Note
Sodium p-cumenesulphon Area of application	Exposure route / Environmental compartment Environment - freshw Environment - sporad (intermittent) release Environment - sewag treatment plant Environment - marine Environment - sedim freshwater Environment - sedim	vater dic dic ge e eent,	ect on healtl	h Descripto r PNEC PNEC PNEC PNEC PNEC	Value 0,23 2,3 100 0,023	mg/l mg/l mg/l mg/l	Note
	Exposure route / Environmental compartment Environment - freshv Environment - spora (intermittent) release Environment - sewag treatment plant Environment - marine Environment - sedim freshwater	vater dic dic ge e eent,	ect on healtl	h Descripto r PNEC PNEC PNEC PNEC PNEC PNEC	Value 0,23 2,3 100 0,023 0,862	mg/l mg/l mg/l mg/l mg/kg dw	Note

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Consumer	Human - dermal	Long term, local effects	DNEL	0,048	mg/cm2	
Consumer	Human - oral	Long term, systemic effects	DNEL	3,8	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	3,8	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	6,6	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	3,8	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	7,6	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	26,9	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,096	mg/cm2	

Area of application	Exposure route / Environmental	Effect on health	Descripto r	Value	Unit	Note
	compartment Environment - freshwater		PNEC	0,07	mg/l	
	Environment - marine		PNEC	0,007	mg/l	
	Environment - periodic release		PNEC	0,028	mg/l	
	Environment - sediment, freshwater		PNEC	0,357	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,0357	mg/kg dry weight	
	Environment - soil		PNEC	1,29	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	100	mg/Ī	
Consumer	Human - dermal	Long term, systemic effects	DNEL	1,5	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	0,28	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	1,5	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	3,3	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,51	mg/m3	

Area of application	Exposure route / Environmental compartment	Effect on health	Descripto r	Value	Unit	Note
	Environment - freshwater		PNEC	0,24	mg/l	
	Environment - periodic release		PNEC	0,13	mg/l	
	Environment - marine		PNEC	0,024	mg/l	
	Environment - sediment, marine		PNEC	0,0917	mg/kg dry weight	

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	Environment - sewage treatment plant		PNEC	10000	mg/l
	Environment - soil		PNEC	0,946	mg/kg dry weight
	Environment - sporadic (intermittent) release		PNEC	0,071	mg/l
	Environment - sediment, freshwater		PNEC	0,917	mg/kg
	Environment - sediment, marine		PNEC	0,092	mg/kg
	Environment - soil		PNEC	7,5	mg/kg
Consumer	Human - dermal	Long term, local effects	DNEL	0,079	mg/cm2
Consumer	Human - oral	Long term, systemic effects	DNEL	15	mg/kg bw/day
Consumer	Human - dermal	Long term, systemic effects	DNEL	1650	mg/kg bw/day
Consumer	Human - inhalation	Long term, systemic effects	DNEL	52	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	2750	mg/kg bw/day
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	175	mg/m3
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,132	mg/cm2

Sodium hydroxide						
Area of application	Exposure route / Environmental compartment	Effect on health	Descripto r	Value	Unit	Note
Consumer	Human - inhalation	Long term, local effects	DNEL	1	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	1	mg/m3	

Nitrilotriethanol		n	1		-	
Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note
	Environmental		r			
	compartment					
	Environment - freshwater		PNEC	0,32	mg/l	
	Environment - marine		PNEC	0,032	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	5,12	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	1,7	mg/kg	
	Environment - sediment, marine		PNEC	0,17	mg/kg	
	Environment - soil		PNEC	0,151	mg/kg dry weight	
Consumer	Human - dermal	Long term, systemic effects	DNEL	2,66	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	3	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,25	mg/m3	

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Consumer	Human - inhalation	Long term, local effects	DNEL	0,4	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	6,3	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	1	mg/m3	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision. (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

OELV-8h = Occupational Exposure Limit Value (8-hour reference period). (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction.

(8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). |

OELV-15min = Occupational Exposure Limit Value (15-minute reference period). (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction.

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU. (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BLV = Biological limit value |

Other information: Carc1A, Carc1B = carcinogenic substance, Cat. 1A or 1B. Muta1A, Muta1B = mutagenic substance, Cat. 1A or 1B. Repr1A, Repr1B = Substances known to be toxic for reproduction, Cat. 1A or 1B. Sk = can be absorbed through skin. Asphx = asphyxiant. Sen = Respiratory sensitizer. BOELV = Binding Occupational Exposure Limit Values. IOELV = Indicative Occupational Exposure Limit Values.

(13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

OELV-8h = Occupational Exposure Limit Value - 8 h (8-hour reference period as a time-weighted average)
 [9] = Inhalable fraction (S.L.424.24), [10] = Respirable fraction (S.L.424.24).

(8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). |

OELV-ST = Occupational Exposure Limit Value - Short-term (15-minute reference period)

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU).

[8] = Short-term exposure limit value in relation to a reference period of 1 minute. (S.L.424.24), [9] = Inhalable fraction (S.L.424.24), [10] = Respirable fraction (S.L.424.24) |

BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Skin = Possibility of a significant uptake through the skin.

[11] = When selecting an appropriate exposure monitoring method, account should be taken of potential limitations and interferences that may arise in the presence of other sulphur compounds. (S.L.424.24), [12] = The mist is defined as the thoracic fraction. (S.L.424.24), [13] = Established in accordance with the Annex to Directive 91/322/EEC. (S.L.424.24), [14] = During exposure

monitoring for mercury and its divalent inorganic compounds, account should be taken of relevant biological monitoring techniques that complement the OELV. (S.L.424.24).

(EU13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (EU14) = The

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substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and nonmetrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: Tight fitting protective goggles with side protection (EN 166). If applicable Face protection (EN 166).

Skin protection - Hand protection: Chemical resistant protective gloves (EN ISO 374). Recommended Protective gloves in butyl rubber (EN ISO 374). Minimum layer thickness in mm: > 0,7 Permeation time (penetration time) in minutes: > 120

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other: Alkali-resistant protection clothing (EN 13034)

Respiratory protection: If OES or MEL is exceeded. Filter A2 P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Green
Odour:	Characteristic
Melting point/freezing point:	There is no information available on this parameter.
Boiling point or initial boiling point and boiling range:	There is no information available on this parameter.
Flammability:	There is no information available on this parameter.
Lower explosion limit:	There is no information available on this parameter.
Upper explosion limit:	There is no information available on this parameter.
Flash point:	There is no information available on this parameter.
Auto-ignition temperature:	There is no information available on this parameter.
Decomposition temperature:	There is no information available on this parameter.
pH:	13
Kinematic viscosity:	There is no information available on this parameter.
Solubility:	Soluble
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	There is no information available on this parameter.
Density and/or relative density:	1,1 g/ml
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.
9.2 Other information	
Corrosive to metals:	There is no information available on this parameter.

SECTION 10: Stability and reactivity

10.1 Reactiv	/itv
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Product corrodes metals.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

Avoid contact with certain metals e.g. aluminium (development of hydrogen gas possible).

10.4 Conditions to avoid

See also section 7. None known

10.5 Incompatible materials

See also section 7. Avoid contact with strong acids. Avoid contact with strong oxidizing agents. Avoid contact with certain metals e.g. aluminium.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

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

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal	ATE	>2000	mg/kg			calculated value
route:						

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Acute toxicity, by inhalation:	ATE	>20	mg/l/4h		calculated
Acute toxicity, by inhalation:	ATE	>5	mg/l/4h		value, Vapours calculated value, Aerosol
Skin corrosion/irritation:				OECD 431 (In Vitro Skin Corrosion - Human Skin Model Test)	Non-caustic
Serious eye					n.d.a.
damage/irritation:					
Respiratory or skin					n.d.a.
sensitisation:					
Germ cell mutagenicity:					n.d.a.
Carcinogenicity:					n.d.a.
Reproductive toxicity:					n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):					n.d.a.
Specific target organ toxicity - repeated exposure (STOT- RE):					n.d.a.
Aspiration hazard:					n.d.a.
Symptoms:					n.d.a.

Sodium p-cumenesulphonate							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute		
					Oral Toxicity)		
Acute toxicity, by dermal	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute		
route:					Dermal Toxicity)		
Acute toxicity, by inhalation:	LC50	>5	mg/l/4h	Rat	OECD 403 (Acute	Aerosol	
					Inhalation Toxicity)		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant	
					Dermal		
					Irritation/Corrosion)		
Serious eye				Rabbit	OECD 405 (Acute	Eye Irrit. 2	
damage/irritation:					Eye		
					Irritation/Corrosion)		
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin	
sensitisation:					Sensitisation)	contact)	
Germ cell mutagenicity:				Mouse	OECD 474	Negative	
					(Mammalian		
					Érythrocyte		
					Micronucleus Test)		
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative	
				typhimurium	Reverse Mutation		
					Test)		
Carcinogenicity:				Rat	OECD 453	Negative	
					(Combined Chronic		
					Toxicity/Carcinogenicit		
					y Studies)		
Reproductive toxicity:	NOAEL	>936	mg/kg	Rat			
Reproductive toxicity (Effects	NOAEL	300-1000	mg/kg	Rat	OECD 421		
on fertility):			bw/d		(Reproduction/Develop		
					mental Toxicity		
					Screening Test)		
Aspiration hazard:						n.a.	
Specific target organ toxicity -	NOAEL	763-3534	mg/kg		OECD 408 (Repeated		
repeated exposure (STOT-					Dose 90-Day Oral		
RE), oral:					Toxicity Study in		
					Rodents)		

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Specific target organ toxicity - repeated exposure (STOT- RE), oral:	NOAEL	763	mg/kg	Rat		Target organ(s): heart, References
Specific target organ toxicity - repeated exposure (STOT- RE), dermal:	LOAEL	1300	mg/kg bw/d	Mouse	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	
Specific target organ toxicity - repeated exposure (STOT- RE), dermal:	NOAEL	>440	mg/kg		OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	

Ethanolamine						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1089	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	2504	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	Does not conform with EU classification.
Acute toxicity, by inhalation:	LC50	1,49	mg/l/4h	Rat		Vapours, Maximum achievable concentration.
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Corr. 1B
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:					(Ames-Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Reproductive toxicity:						Negative
Symptoms:						ataxia, respiratory distress, drowsiness, coughing, mucous membrane irritation, nausea
Specific target organ toxicity - repeated exposure (STOT- RE), oral:	NOAEL	300	mg/kg bw/d	Rat		
Specific target organ toxicity - repeated exposure (STOT- RE), inhalat.:	NOAEL	10	mg/m3	Rat	OECD 412 (Subacute Inhalation Toxicity - 28-Day Study)	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts											
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes					
Acute toxicity, by oral route:	LD50	4100	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)						
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)						

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Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Irrit. 2
Serious eye damage/irritation:		>=10	%	Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Serious eye damage/irritation:		>=5	%	Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 475 (Mammalian Bone Marrow Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Reproductive toxicity:	NOAEL	>1000	mg/kg	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative, References
Reproductive toxicity:	NOAEL	>300	mg/kg	Rat	OECD 416 (Two- generation Reproduction Toxicity Study)	Negative, References
Aspiration hazard:						No
Symptoms:						mucous membrane irritation
Specific target organ toxicity - repeated exposure (STOT- RE), oral:	NOAEL	>225	mg/kg	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Target organ(s): liver, References

Sodium hydroxide									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Acute toxicity, by dermal route:	LD50	>2500	mg/kg	Rabbit	Regulation (EC) 440/2008 B.3 (ACUTE TOXICITY (DERMAL)				
Skin corrosion/irritation:				Rabbit	· · · · · · · · · · · · · · · · · · ·	Skin Corr. 1A			
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1			
Respiratory or skin sensitisation:				Human being	(Patch-Test)	Not sensitizising			
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative			

Nitrilotriethanol						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	6400	mg/kg	Rat	OECD 401 (Acute	
					Oral Toxicity)	
Acute toxicity, by dermal	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute	
route:					Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant
					Dermal	
					Irritation/Corrosion)	

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Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:				-	Sensitisation)	contact)
Germ cell mutagenicity:					OECD 474	Negative
					(Mammalian	
					Erythrocyte	
					Micronucleus Test)	
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
com con managementy.				typhimurium	Reverse Mutation	linguare
				()pinnanani	Test)	
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro	Negative
Germ cen matagementy.				Wouse	Mammalian Cell Gene	Negative
					Mutation Test)	
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative
Gerni cell mutagenicity.						Negative
					Mammalian	
					Chromosome	
2				-	Aberration Test)	
Carcinogenicity:	NOAEL	250	mg/kg	Rat	OECD 453	
			bw/d		(Combined Chronic	
					Toxicity/Carcinogenicit	
					y Studies)	
Carcinogenicity:					OECD 451	With nitrosating
					(Carcinogenicity	agents
					Studies)	nitrosamines
						may form., In
						animal
						experiments
						nitrosamines
						have proved
						carcinogenic.
Reproductive toxicity:	NOAEL	300	mg/kg	Rat	OECD 421	carentegerne.
1			bw/d		(Reproduction/Develop	
					mental Toxicity	
					Screening Test)	
Symptoms:						unconsciousne
eymptome.						s, diarrhoea,
						coughing,
						collapse,
						fatigue,
						dizziness,
						nausea and
Openifie towned and the initial		1000		Det		vomiting.
Specific target organ toxicity -	NOAEL	1000	mg/kg	Rat	OECD 408 (Repeated	
repeated exposure (STOT-			bw/d		Dose 90-Day Oral	
RE), oral:					Toxicity Study in	
					Rodents)	
Specific target organ toxicity -	NOAEL	125	mg/kg	Rat	OECD 411	
repeated exposure (STOT-			bw/d		(Subchronic Dermal	
RE), dermal:					Toxicity - 90-day	
					Study)	
Specific target organ toxicity -	NOAEC	0,5	mg/l	Rat	OECD 412 (Subacute	
repeated exposure (STOT-	_		5		Inhalation Toxicity -	
RE), inhalat.:					28-Day Study)	
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11.2. Information on other hazards

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting						n.d.a.
properties:						
Other information:						n.d.a.

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SECTION 12: Ecological information

Vorreiniger B Art.: 283999							
Art.: 283999 Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	Lindpoint	TIME	Value	Unit	Organishi	Test method	n.d.a.
12.1. Toxicity to							n.d.a.
daphnia:							india.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and							The
degradability:							surfactant(s)
							contained in
							this mixture
							complies(comp
							y) with the
							biodegradability
							criteria as laid
							down in
							Regulation
							(EC)
							No.648/2004
							on detergents.
							Data to suppor
							this assertion
							are held at the
							disposal of the
							competent
							authorities of
							the Member
							States and will be made
							available to
							them, at their
							direct request
							or at the
							request of a
							detergent
							manufacturer.
12.3. Bioaccumulative							n.d.a.
potential:							
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT							n.d.a.
and vPvB assessment							
12.6. Endocrine							Does not apply
disrupting properties:							to mixtures.
12.7. Other adverse							No information
effects:							available on
							other adverse
							effects on the
							environment.
Other information:							DOC-
							elimination
							degree(comple
							ing organic
							substance)>=
							80%/28d: No

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 Other information:
 AOX

 %

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Cyprinus caprio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	96h	31	mg/l	Pseudokirchnerie Ila subcapitata		EPA OTS 797.1050
12.2. Persistence and degradability:		28d	>60	%	activated sludge	OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		-1,1			OECD 107 (Partition Coefficient (n- octanol/water) - Shake Flask Method)	Bioaccumulatio n is unlikely (LogPow < 1). 23 °C
12.4. Mobility in soil:						,	Not to be expected
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

According to

the recipe, contains no AOX.

Ethanolamine							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to annelids:	EC50	>60d	4033	mg/kg dw		OECD 207 (Earthworm, Acute Toxicity Tests)	Eisenia andrei
63d							
Other organisms:	EC50	21d	1817	mg/kg dw			Elymus lanceolatus
12.1. Toxicity to fish:	NOEC/NOEL	30d	1,2	mg/l	Oryzias latipes	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to fish:	LC50	96h	170	mg/l	Carassius auratus		

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	r				1	I	
12.1. Toxicity to fish:	NOEC/NOEL	42d	1,2	mg/l	Oryzias latipes	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.2. Persistence and degradability:		28d	96	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.1. Toxicity to fish:	LC50	96h	105	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	27,34	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,85	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	2,5	mg/l	Selenastrum capricornutum	OEĆD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOAEC	72h	1	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to fish:	LC50	96h	349	mg/l	Cyprinus caprio	84/449/EEC C.1	
12.1. Toxicity to algae:	EC50	72h	22	mg/l	Scenedesmus subspicatus	Regulation (EC) 440/2008 C.3 (FRESHWATER ALGAE AND CYANOBACTER IA, GROWTH INHIBITION TEST)	
12.2. Persistence and degradability:	DOC	21d	> 90	%	activated sludge	OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable
12.2. Persistence and degradability:		21d	>90	%		OECD 302 A (Inherent Biodegradability - Modified SCAS Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		< 100				Slight
12.3. Bioaccumulative potential:	Log Pow		(-2,3) - (-1,31)			OECD 107 (Partition Coefficient (n- octanol/water) - Shake Flask Method)	SlightpH 6,8 - 7,3
25 °C							
12.4. Mobility in soil:	рОС		0-50				High
12.4. Mobility in soil:	Koc		1,17				estimated
Toxicity to bacteria:	EC50	16h	110	mg/l	Pseudomonas putida	DIN 38412 T.8	
12.4. Mobility in soil:	H (Henry)		0,00003	Pa*m3/m ol			estimated

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12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Toxicity to bacteria:	EC20	30min	> 1000	mg/l	activated sludge	ISO 8192	
Other organisms:	EC50	21d	1290	mg/kg dw			Medicago sativa (Alfalfa)
Other organisms:	EC50	28d	2500	mg/kg dw			Folsomia candida
Other organisms:	EC50	14d	2939	mg/kg dw			Hordeum vulgare
Other information:	BOD	5d	800	mg/g			

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	7,1	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	28d	0,1	mg/l	Oncorhynchus mykiss	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,27	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	7,2	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	NOEC/NOEL	96h	0,95	mg/l		OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	72h	27,7	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	95	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	>70	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable

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		,				i	
12.2. Persistence and degradability:	DOC	28d	100	%	activated sludge	Regulation (EC) 440/2008 C.4-C (DETERMINATI ON OF 'READY'	Readily biodegradable
						BIODEGRADABI LITY - CO2 EVOLUTION TEST)	
12.3. Bioaccumulative potential:	BCF		-1,38			,	Low
12.4. Mobility in soil:	Koc		191				calculated value
12.5. Results of PBT and vPvB assessment							No PBT substance
Toxicity to bacteria:	EC50	16h	>10	g/l	Pseudomonas putida	DIN 38412 T.8	

Sodium hydroxide							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to daphnia:	EC50	48h	40,4	mg/l	Ceriodaphnia spec.		
12.1. Toxicity to fish:	LC50	96h	45,4	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	LC50	96h	125	mg/l	Gambusia affinis		
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:	Log Kow		-3,88				Negative
12.5. Results of PBT and vPvB assessment							Not relevant for inorganic substances.
Toxicity to bacteria:	EC50	15min	22	mg/l	Photobacterium phosphoreum		

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative potential:	BCF		<3,9		Cyprinus caprio	OECD 305 (Bioconcentration - Flow-Through Fish Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	16	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to fish:	LC50	96h	11800	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	References
12.2. Persistence and degradability:		28d	97	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Biodegradable
12.1. Toxicity to daphnia:	EC50	48h	609,9	mg/l	Ceriodaphnia spec.	OECD 202 (Daphnia sp. Acute Immobilisation Test)	

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12.3. Bioaccumulative potential:	Log Pow		-2,3			OECD 107 (Partition Coefficient (n- octanol/water) - Shake Flask Method)	Not accepted due to the log Pow - value.
12.1. Toxicity to algae:	ErC50	72h	512	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to insects:	LC50	3d	49,95	mg/kg	Drosophila melanogaster		
Toxicity to bacteria:	EC50	16h	>10.000	mg/l	Pseudomonas putida		

SECTION 13: Disposal considerations

13.1 Waste treatment methods For the substance / mixture / residual amounts

EC disposal code no .:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

20 01 29 detergents containing hazardous substances Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site. E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements		
14.1. UN number or ID number:	1760	
Transport by road/by rail (ADR/RID)		
14.2. UN proper shipping name:		
UN 1760 CORROSIVE LIQUID, N.O.S. (ETHANOLAMINE, SODIUM HYDROXIDE)		
14.3. Transport hazard class(es):	8	
14.4. Packing group:	111	•
Classification code:	C9	
LQ:	5 L	
14.5. Environmental hazards:	Not applicable	
Tunnel restriction code:	E	
Transport by sea (IMDG-code)		
14.2. UN proper shipping name:		
CORROSIVĖ LIQUID, N.O.S. (ETHANOLAMINE,SODIUM HYDROXIDE)		
14.3. Transport hazard class(es):	8	
14.4. Packing group:	111	·
EmS:	F-A, S-B	
Marine Pollutant:	n.a	
14.5. Environmental hazards:	Not applicable	
Transport by air (IATA)		
14.2. UN proper shipping name:		
- · · · · · · · · · · · · · · · · · · ·		

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Corrosive liquid, n.o.s. (ETHANOLAMINE,SODIUM HYDROXIDE)14.3. Transport hazard class(es):814.4. Packing group:III14.5. Environmental hazards:Not applicable

14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained. All persons involved in transporting must observe safety regulations. Precautions must be taken to prevent damage.

14.7. Maritime transport in bulk according to IMO instruments

Freighted as packaged goods rather than in bulk, therefore not applicable. Minimum amount regulations have not been taken into account. Danger code and packing code on request. Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)! Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):

REGULATION (EC) No 648/2004

5 % or over but less than 15 % non-ionic surfactants anionic surfactants

2-BROMO-2-NITROPROPANE-1,3-DIOL

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: n.a. Employee training in handling dangerous goods is required. These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
STOT SE 3, H335	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Eye Dam. 1, H318	Classification according to calculation procedure.
Met. Corr. 1, H290	Classification based on test data.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3). H314 Causes severe skin burns and eye damage. H290 May be corrosive to metals. H302 Harmful if swallowed. H312 Harmful in contact with skin.

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H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation Skin Irrit. — Skin irritation Eye Dam. — Serious eye damage Met. Corr. — Substance or mixture corrosive to metals Eye Irrit. — Eye irritation Acute Tox. — Acute toxicity - oral Acute Tox. — Acute toxicity - oral Acute Tox. — Acute toxicity - dermal Acute Tox. — Acute toxicity - inhalation Skin Corr. — Skin corrosion Aquatic Chronic — Hazardous to the aquatic environment - chronic

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approximately approx. Article number Art., Art. no. ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF Bioconcentration factor BSEF The International Bromine Council body weight bw CAS Chemical Abstracts Service CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon dw dry weight for example (abbreviation of Latin 'exempli gratia'), for instance e.g. EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants) European Community EC ECHA European Chemicals Agency ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect EEC European Economic Community

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These statements were made by:

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