## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

# SulNOx Eco

Version	Revision Date:	DE / EN	Date of last issue: 03.05.2022
2.0	01.09.2023		Date of first issue: 06.05.2019

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

1.1 Product identifier Trade name	:	SulNOx Eco
1.2 Relevant identified uses of t	he s	substance or mixture and uses advised against
Use of the Sub- stance/Mixture	:	Surfactant
1.3 Details of the supplier of the	e saf	ety data sheet
Company	:	Nouryon Surface Chemistry AB PO BOX 47067 SE 40258 Goteborg Sweden
Telephone	:	+4630385000
Telefax	:	+4630384659
E-mail address of person responsible for the SDS	:	Regulatory.Affairs@nouryon.com
1.4 Emergency telephone numb Emergency telephone num		020 99 60 00 Kemiakuten, SE +31 57 06 79 211 24 ho

Emergency telephone num- : 020 99 60 00 Kemiakuten, SE +31 57 06 79 211 24 hours ber emergency response number-: Nouryon Emergency Response Centre: +31 570 679211

Poison Centre: -

## **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 Acute toxicity, Category 3 Acute toxicity, Category 4 Skin irritation, Category 2 Serious eye damage, Category 1 Long-term (chronic) aquatic bazard. Cat-	<ul> <li>H302: Harmful if swallowed.</li> <li>H331: Toxic if inhaled.</li> <li>H312: Harmful in contact with skin.</li> <li>H315: Causes skin irritation.</li> <li>H318: Causes serious eye damage.</li> <li>H412: Harmful to aquatic life with long lasting ef-</li> </ul>
Long-term (chronic) aquatic hazard, Cat- egory 3	H412: Harmful to aquatic life with long lasting effects.

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### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)			
Hazard pictograms	:		
Signal word	:	Danger	
Hazard statements	:	<ul> <li>H302 + H312 Harmful if swallowed or in contact with skin.</li> <li>H315 Causes skin irritation.</li> <li>H318 Causes serious eye damage.</li> <li>H331 Toxic if inhaled.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>	
Precautionary statements	:	<ul> <li>Prevention:</li> <li>P261 Avoid breathing mist or vapours.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P273 Avoid release to the environment.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.</li> </ul>	
		<b>Response:</b> P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if pre- sent and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.	
		Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed.	

#### Hazardous components which must be listed on the label:

2-Butoxyethanol

Amides, C8-18 and C18-unsatd., N,N-bis(hydroxyethyl)

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Components

Components	-		
Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
2-Butoxyethanol	111-76-2 203-905-0 603-014-00-0 01-2119475108-36	Acute Tox. 4; H302 Acute Tox. 3; H331 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute toxicity esti- mate Acute oral toxicity: 1.200 mg/kg Acute inhalation tox- icity (vapour): 3 mg/l 10,01 mg/l Acute dermal toxicity: 1.001 mg/kg	>= 80 - < 90
Amides, C8-18 and C18-unsatd., N,N-bis(hydroxyethyl)	68155-07-7 268-935-9	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 2; H411	>= 15 - < 20
2-Propylheptanol ethoxylate	160875-66-1	Eye Irrit. 2; H319	>= 1 - < 5
Diethanolamine	111-42-2 203-868-0 603-071-00-1 01-2119488930-28	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Repr. 2; H361fd STOT RE 2; H373 (Blood, Liver, Kidney, Nervous system) Acute toxicity esti-	>= 0,1 - < 1

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Acute oral toxicity: 1.600 mg/kg

For explanation of abbreviations see section 16.

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures General advice : Immediate medical attention is required. Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. If inhaled If breathed in, move person into fresh air. : Call a physician or poison control centre immediately. Remove to fresh air. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear. In case of skin contact Take off contaminated clothing and shoes immediately. : Wash the skin immediately with soap and water. If skin irritation persists, call a physician.

In case of eye contact	<ul> <li>Rinse with plenty of water. Get medical attention immediately. Continue to rinse during transport. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.</li> </ul>
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. Never give anything by mouth to an unconscious person.

Take victim immediately to hospital.

#### 4.2 Most important symptoms and effects, both acute and delayed

Risks	: Harmful if swallowed or in contact with skin. Causes skin irritation. Causes serious eye damage. Toxic if inhaled.
	Toxic if inhaled.

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### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

## **SECTION 5: Firefighting measures**

5.1	Extinguishing media		
	Suitable extinguishing media	:	Alcohol-resistant foam Dry chemical
	Unsuitable extinguishing media	:	High volume water jet
5.2	Special hazards arising from	the	substance or mixture
	Specific hazards during fire- fighting		
	Hazardous combustion prod- ucts	:	Carbon oxides Nitrogen oxides (NOx)
5.3	Advice for firefighters		
	Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.
	Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored sepa- rately in closed containments.

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, p	rotective equipment and emergency procedures
Personal precautions	<ul> <li>Use personal protective equipment. Wear respiratory protection. Ensure adequate ventilation. Evacuate personnel to safe areas. Only qualified personnel equipped with suitable protective equipment may intervene.</li> </ul>

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		Prevent u	nauthorised persons entering the zone.	
	nmental precautions			
Environmental precautions			Do not flush into surface water or sanitary sewer system. Discharge into the environment must be avoided.	
6.3 Method	ds and material for co	ontainment and	cleaning up	
Metho	ds for cleaning up	acid binde	vith inert absorbent material (e.g. sand, silica gel, er, universal binder, sawdust). uitable, closed containers for disposal.	

For disposal considerations see section 13. For personal protection see section 8.

## **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

	9	
Advice on safe handling	:	For personal protection see section 8. Avoid formation of aerosol. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the ap- plication area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
Advice on protection against fire and explosion	:	Avoid formation of aerosol. Keep away from sources of igni- tion - No smoking. No sparking tools should be used. Take measures to prevent the build up of electrostatic charge.
Hygiene measures	:	Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.
7.2 Conditions for safe storage,	inc	luding any incompatibilities
Requirements for storage areas and containers	:	Prevent unauthorized access. No smoking. Keep in a well- ventilated place.
Storage class (TRGS 510)	:	6.1C
Further information on stor- age stability	:	No decomposition if stored and applied as directed.

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## 7.3 Specific end use(s)

Specific use(s)

: No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
2-Butoxyethanol	111-76-2	TWA	20 ppm 98 mg/m3	2000/39/EC	
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			te through the	
		STEL	50 ppm 246 mg/m3	2000/39/EC	
	Further information: Identifies the possibility of significant uptake through the skin, Indicative				
		AGW	10 ppm 49 mg/m3	DE TRGS 900	
	Peak-limit: excursion factor (category): 2;(I)				
	Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
Diethanolamine	111-42-2	AGW (Vapour and aerosols)	0,11 ppm 0,5 mg/m3	DE TRGS 900	
	Peak-limit: excursion factor (category): 1;(I)				
	Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child, Substance sensitizing through the skin				

#### **Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Basis
2-Butoxyethanol	111-76-2	butoxy acetic acid: 150 mg/g creati- nine (Urine)	In case of long- term exposure: after more than one shift, Immedi- ately after expo- sure or after work- ing hours	TRGS 903

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef-	Value
			fects	
Diethanolamine	Workers	Skin contact	Long-term systemic	0,13 mg/kg

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		effects	bw/day
Workers	Inhalation	Long-term local ef- fects	0,5 mg/m3
Workers	Inhalation	Long-term systemic effects	0,75 mg/m3
Consumers	Skin contact	Long-term systemic effects	0,07 mg/kg bw/day
Consumers	Ingestion	Long-term systemic effects	0,06 mg/kg bw/day
Consumers	Inhalation	Long-term systemic effects	0,125 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Diethanolamine	Fresh water	0,021 mg/l
	Marine water	0,002 mg/l
	Intermittent use/release	0,095 mg/l
	Fresh water sediment	0,092 mg/kg dry weight
	Marine sediment	0,0092 mg/kg dry weight
	Sewage treatment plant	100 mg/l
	Soil	1,63 mg/kg dry weight
	Secondary Poisoning	1,04 mg/kg food

### 8.2 Exposure controls

#### **Engineering measures**

Effective exhaust ventilation system Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

Eye/face protection Hand protection		Tightly fitting safety goggles
Material	:	Neoprene
Material	:	Nitrile rubber
Skin and body protection Respiratory protection	:	Protective suit In the case of vapour or aerosol formation use a respirator with an approved filter. Wear full face mask supplied with: Combination filter: ABEKP.

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## **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	clear, light yellow
Odour	:	No information available.
Odour Threshold	:	No data available
Melting point	:	No data available
Boiling point	:	No data available
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Flash point	:	67 °C Method: Pensky-Martens closed cup
Decomposition temperature	:	No data available
рН	:	7,0 - 9,9 Concentration: 1 %
Viscosity Viscosity, dynamic	:	9 mPa.s (20 °C)
Viscosity, kinematic	:	No data available
Solubility(ies) Water solubility	:	dispersible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available

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Vap	our pressure	: No data availa	able
Rela	tive density	: No data availa	able
Rela	tive vapour density	: No data availa	able
9.2 Othe	r information		
Expl	osives	: Not explosive	
Oxic	lizing properties	: The substance	e or mixture is not classified as oxidizing.
Flan	nmability (liquids)	: No data available	
Self	ignition	: No data availa	able
Evaj	poration rate	: No data availa	able

## **SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b> Stable under normal conditions.	
10.2 Chemical stability	
Stable under recommended storage	ge conditions.
10.3 Possibility of hazardous reactio	ns
Hazardous reactions :	No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid	
Conditions to avoid :	Heat, flames and sparks.
10.5 Incompatible materials	
Materials to avoid :	None known.
10.6 Hazardous decomposition prod	ucts
No hazardous decomposition proc Thermal decomposition :	lucts are known. No data available

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**Product:** 

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## **SECTION 11: Toxicological information**

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

Acute toxicity Harmful if swallowed or in contact with skin. Toxic if inhaled.

TTOULOL.	
Acute oral toxicity	: Acute toxicity estimate: 1.500 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate: 3,75 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate: 1.375 mg/kg Method: Calculation method
Components:	
2-Butoxyethanol:	
Acute oral toxicity	: Acute toxicity estimate: 1.200 mg/kg Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008
	LD50 (Rat): > 300 - 2.000 mg/kg
Acute inhalation toxicity	: Acute toxicity estimate: 3 mg/l Test atmosphere: vapour Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008
	LC50 (Rat): > 10 - 20 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method Remarks: Information taken from reference works and the literature.
	Acute toxicity estimate: 10,01 mg/l Test atmosphere: vapour Method: Calculation method

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Acute	dermal toxicity	Method: (	abbit): > 1.000 - 2.000 mg/kg Calculation method : Information taken from reference works and the
			icity estimate: 1.001 mg/kg Calculation method
Amid	es, C8-18 and C18-u	nsatd., N,N-bis(	hydroxyethyl):
Acute	oral toxicity		at): > 5.000 mg/kg DECD Test Guideline 401
2-Pro	pylheptanol ethoxyl	ate:	
Acute	oral toxicity		at): > 2.000 mg/kg : Read-across (Analogy)
Dieth	anolamine:		
Acute	oral toxicity		at): 1.600 mg/kg DECD Test Guideline 401
			icity estimate: 1.600 mg/kg Calculation method
Acute	inhalation toxicity		Not classified due to data which are conclusive insufficient for classification.
Acute	dermal toxicity	: Remarks	: No data available
	corrosion/irritation es skin irritation.		
	oonents:		
2-But	oxyethanol:		
Resul	t	: Irritating t	o skin.
Amid	es, C8-18 and C18-u	nsatd., N,N-bis(	hydroxyethyl):
Speci		: Rabbit	
Resul	t	: Skin irrita	tion
2-Pro	pylheptanol ethoxyl	ate:	
Resul	t	: No skin ir	ritation

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#### **Diethanolamine:**

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Irritating to skin.

### Serious eye damage/eye irritation

Causes serious eye damage.

#### Components:

### 2-Butoxyethanol:

Result

: Irritating to eyes.

#### Amides, C8-18 and C18-unsatd., N,N-bis(hydroxyethyl):

Species	:	Rabbit
Result	:	Risk of serious damage to eyes.

#### 2-Propylheptanol ethoxylate:

Result

: Mild eye irritation

#### Diethanolamine:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Risk of serious damage to eyes.

### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### **Respiratory sensitisation**

Not classified based on available information.

#### Components:

## 2-Propylheptanol ethoxylate:

: Does not cause skin sensitisation.

#### Diethanolamine:

Test Type	: Maximisation Test
Species	: Guinea pig

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Metho Resu		:	OECD Test Gui Does not cause	deline 406 skin sensitisation.
	<b>cell mutagenicity</b> lassified based on avai	lable	information.	
Com	oonents:			
Dieth	anolamine:			
Geno	toxicity in vitro	:	Test Type: Ame Result: negative	
Geno	toxicity in vivo	:	Test Type: Chro Species: Mouse Result: negative	
	nogenicity lassified based on avai	lable	information.	
<u>Com</u>	oonents:			
Dieth	anolamine:			
Resu	lt	:	Not classified du ficient for classif	ue to data which are conclusive although insu
1000				ication.
Repr	oductive toxicity lassified based on avai	lable		ication.
<b>Repr</b> e Not c	-	lable		ication.
Repro Not cl <u>Com</u> Dieth	lassified based on avai <u> ponents:</u> anolamine: pductive toxicity - As-		information. Some evidence animal experime	
Repro Not c Com Dieth Repro sessr	lassified based on avai <u> ponents:</u> anolamine: pductive toxicity - As-	:	information. Some evidence animal experime sexual function	of adverse effects on development, based or ents., Some evidence of adverse effects on
Repro Not c Com Dieth Repro sessr STOT	lassified based on avail <b>conents:</b> <b>anolamine:</b> oductive toxicity - As- nent <b>- single exposure</b>	:	information. Some evidence animal experime sexual function	of adverse effects on development, based or ents., Some evidence of adverse effects on
Repro Not cl Com Dieth Repro sessr STOT Not cl Com	lassified based on avail <b>conents:</b> <b>anolamine:</b> oductive toxicity - As- nent <b>- single exposure</b> lassified based on avail	:	information. Some evidence animal experime sexual function	of adverse effects on development, based or ents., Some evidence of adverse effects on

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#### STOT - repeated exposure

Not classified based on available information.

#### Components:

#### Diethanolamine:

Exposure routes	: Oral
Target Organs	: Blood, Liver, Kidney, Nervous system
Assessment	: May cause damage to organs through prolonged or repeated
	exposure.

#### Repeated dose toxicity

#### Components:

#### 2-Propylheptanol ethoxylate:

: 250 mg/kg

### **Aspiration toxicity**

Not classified based on available information.

#### **Components:**

#### Diethanolamine:

Not classified due to data which are conclusive although insufficient for classification.

### 11.2 Information on other hazards

#### Endocrine disrupting properties

#### Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### Further information

## Product:

Remarks

: No further data available.

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## **SECTION 12: Ecological information**

#### 12.1 Toxicity

Components:

2-Butoxyethanol:			
Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.490 mg/l Exposure time: 96 h Method: OECD Test Guideline 203	
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1.000 mg/l Exposure time: 48 h Method: OECD Test Guideline 202	
Amides, C8-18 and C18-unsa	atd	N.N-bis(hvdroxvethvl):	
Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 4,9 mg/l Exposure time: 96 h	
		LC50 (Oncorhynchus mykiss (rainbow trout)): 2,4 mg/l Exposure time: 96 h	
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3,3 mg/l Exposure time: 24 h Test Type: static test	
Toxicity to algae/aquatic plants	:	NOEC (Scenedesmus subspicatus (algae)): 2 mg/l Exposure time: 72 h	
2-Propylheptanol ethoxylate	:		
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 1 - 10 mg/l Exposure time: 96 h Remarks: Read-across (Analogy)	
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l Exposure time: 48 h Remarks: Read-across (Analogy)	
Toxicity to algae/aquatic plants	:	EC50 (Scenedesmus subspicatus (algae)): > 10 - 100 mg/l Exposure time: 72 h Remarks: Read-across (Analogy)	

## Diethanolamine:

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٦	Foxicity	to fish	:	Exposure time: 96 Test Type: static t	
		to daphnia and other invertebrates	:	Exposure time: 48	agna (Water flea)): > 10 - 100 mg/l 3 h tion taken from reference works and the
	Toxicity plants	to algae/aquatic	:	EC50 (Pseudokiro 10 mg/l Exposure time: 96	chneriella subcapitata (green algae)): > 1 - 6 h
6		to daphnia and other invertebrates (Chron- y)	:	NOEC: 1,05 mg/l Exposure time: 21 Species: Daphnia Test Type: semi-s	magna (Water flea)
ŀ	Acute a	icology Assessment quatic toxicity	:	Toxic to aquatic lif	e.
		ence and degradabili	ty		
_	<u>Compo</u>				
		<b>xyethanol:</b> adability	:	Result: Readily bi	odegradable.
	Biochen mand (E	nical Oxygen De- 3OD)	:	Remarks: No data	a available
2	2-Propy	/Iheptanol ethoxylate	:		
E	Biodegr	adability	:	Result: Readily bio Remarks: Read-a	
	Biochen mand (E	nical Oxygen De- 3OD)	:	Remarks: No data	a available
[	Diethar	olamine:			
E	Biodegr	adability	:	Result: Readily bi	odegradable.
	Biochen mand (E	nical Oxygen De- 3OD)	:	Remarks: No data	available

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### 12.3 Bioaccumulative potential

Components:						
2-Butoxyethanol:						
Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.				
Partition coefficient: n- octanol/water	:	log Pow: 0,81				
Amides, C8-18 and C18-unsa	atd	., N,N-bis(hydroxyethyl):				
Partition coefficient: n- octanol/water	:	log Pow: 1,35 - 4,84 (20 °C)				
2-Propylheptanol ethoxylate	:					
Bioaccumulation	:	Remarks: No data available				
Diethanolamine:						
Bioaccumulation	:	Remarks: Not expected considering the low log Pow value.				
Partition coefficient: n- octanol/water	:	log Pow: -2,46 (25 °C)				
12.4 Mobility in soil	12.4 Mobility in soil					
Components:						
2-Butoxyethanol:						
Mobility	:	Remarks: No data available				
2-Propylheptanol ethoxylate	:					
Mobility	:	Remarks: No data available				
Diethanolamine:						
Mobility	:	Remarks: Adsorption to the solid soil particles is not expected., Transport to air is not expected.				
12.5 Results of PBT and vPvB assessment						

### Product:

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels o 0.1% or higher.	Assessment	: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
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	Comp	onents:			
	2-Buto	oxyethanol:			
	Assess	sment	:	Bioaccumula	ce is not considered to be a PBT (Persistent, tion, Toxic). This substance is not considered to y Persistent nor very Bioaccumulating)
	Amide	s, C8-18 and C18-un	satd	., N,N-bis(hyd	lroxyethyl):
	Assess	sment	:	Remarks: No	t applicable
	2-Prop	ylheptanol ethoxyla	te:		
	Assess		:	lating and to	ce is not considered to be persistent, bioaccumu- kic (PBT) This substance is not considered to be nt and very bioaccumulating (vPvB).
	Dietha	nolamine:			
	Assess	sment	:	Bioaccumula	ce is not considered to be a PBT (Persistent, tion, Toxic). This substance is not considered to y Persistent nor very Bioaccumulating)
12.6	6 Endoc	rine disrupting prop	ertie	s	
	Produ	ct:			
	Assess		:	ered to have REACH Artic	ce/mixture does not contain components consid- endocrine disrupting properties according to le 57(f) or Commission Delegated regulation 00 or Commission Regulation (EU) 2018/605 at 6 or higher.
12.7	7 Other	adverse effects			
	Produ	<u>ct:</u>			
	Additio mation	nal ecological infor-	:		ental hazard cannot be excluded in the event of al handling or disposal.
SE	CTION	13: Disposal consi	der	ations	
13.1	l Waste	treatment methods			
	Produc		:	The product courses or th	should not be allowed to enter drains, water e soil.

Do not contaminate ponds, waterways or ditches with chemi-

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Conta	minated packaging	tion. : Empty remain	ntents/container in accordance with local regula-

## **SECTION 14: Transport information**

## 14.1 UN number or ID number

ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
ΙΑΤΑ	:	Not regulated as a dangerous good
14.2 UN proper shipping name		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
ΙΑΤΑ	:	Not regulated as a dangerous good
14.3 Transport hazard class(es)		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
ΙΑΤΑ	:	Not regulated as a dangerous good
14.4 Packing group		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good

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IATA (Cargo)	:	Not regulated as a dangerous good
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IATA (Passenger) : Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Not applicable

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufa the market and use of certain dange mixtures and articles (Annex XVII)		lowing e	ns of restriction for the fol- ntries should be considered: on list 75, 3
			end to use this product as k, please contact your ven-
REACH - Candidate List of Substand Concern for Authorisation (Article 59		Not appl	icable
Regulation (EC) No 1005/2009 on si plete the ozone layer		Not appl	icable
Regulation (EU) 2019/1021 on persi tants (recast)	stent organic pollu- :	Not appl	icable
Regulation (EC) No 649/2012 of the ment and the Council concerning the of dangerous chemicals	•	Not appl	icable
REACH - List of substances subject (Annex XIV)	to authorisation :	Not appl	icable
Seveso III: Directive 2012/18/EU of t pean Parliament and of the Council control of major-accident hazards in dangerous substances.	on the	UTE TOX	IC
	IGK 2 obviously hazard lassification according t		

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TA Luft List (Germany)	<ul> <li>5.2.1: Total dust: Not applicable</li> <li>5.2.2: Inorganic substances in powdered form: Not applicable</li> <li>5.2.4: Inorganic substances in gaseous form: Not applicable</li> <li>5.2.5: Organic Substances: Not applicable</li> <li>5.2.7.1.1: Carcinogenic substance: Not applicable</li> <li>5.2.7.1.1: Quartz fine dust PM4: Not applicable</li> <li>5.2.7.1.1: Formaldehyde: Not applicable</li> <li>5.2.7.1.1: fibres: Not applicable</li> <li>5.2.7.1.2: Germ cell mutagens: Not applicable</li> <li>5.2.7.1.3: Substances toxic to reproduction: Not applicable</li> <li>5.2.7.2: Poorly degradable, easily enrichable and highly toxic organic substances: Not applicable</li> </ul>
	Not applicable

#### Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

The components of this product are reported in the following inventories:					
TCSI	:	On the inventory, or in compliance with the inventory			
AIIC	:	All components are listed on the inventory, regulatory obliga- tions/restrictions apply			
DSL	:	All components of this product are on the Canadian DSL			
ENCS	:	On the inventory, or in compliance with the inventory			
ISHL	:	On the inventory, or in compliance with the inventory			
KECI	:	On the inventory, or in compliance with the inventory			

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PICCS	3	:	Not in compliance	e with the inventory
IECSC	)	:	On the inventory,	or in compliance with the inventory
NZIoC		:	Not in compliance with the inventory	
TECI :		:	Not in compliance with the inventory	
TSCA : All chemical substances in this product are eit TSCA Inventory or in compliance with a TSCA emption.				
15.2 Chem	ical safety assessme	nt		
2-Butc	oxyethanol	:	No information av	vailable.
2-Prop	by heptanol ethoxylate	:	A Chemical Safe stance.	ty Assessment is not required for this sub-
Diethanolamine : A Chemical Safety Assessment has been carried o		ty Assessment has been carried out for this		

substance.

## **SECTION 16: Other information**

Full text of H-Statements		
H302	:	Harmful if swallowed.
H312	:	Harmful in contact with skin.
H315	:	Causes skin irritation.
H318	:	Causes serious eye damage.
H319 :	:	Causes serious eye irritation.
H331 :	:	Toxic if inhaled.
H361fd	:	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	:	May cause damage to organs through prolonged or repeated exposure if swallowed.
H411 :	:	Toxic to aquatic life with long lasting effects.
Full text of other abbreviation	າຣ	
Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Repr.	:	Reproductive toxicity
Skin Irrit.	:	Skin irritation
STOT RE	:	Specific target organ toxicity - repeated exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

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DE TRGS 900	:	Germany. TRGS 900 - Occupational exposure limit values.
TRGS 903	:	TRGS 903 - Biological limit values
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
DE TRGS 900 / AGW	:	Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information					
Classification of the	mixture:	Classification procedure:			
Acute Tox. 4	H302	Calculation method			
Acute Tox. 3	H331	Calculation method			
Acute Tox. 4	H312	Calculation method			

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Skin Ir	rrit. 2	H315	Calculation method
Eye D	am. 1	H318	Calculation method
Aquat	ic Chronic 3	H412	Calculation method

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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