SAFETY DATA SHEET

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

SulNOxEco™

Version	Revision Date:	DE / EN	Date of last issue: 05.02.2025
3.1	06.03.2025		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 : SulNOxEco™

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

Use of the Substance/Mixture : Surfactant

1.3 Details of the supplier of the safety 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 number

Emergency telephone number : 020 99 60 00 Kemiakuten, SE +31 57 06 79 211 24 hours 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	H302: Harmful if swallowed.
Acute toxicity, Category 3	H331: Toxic if inhaled.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P261	Avoid breathing mist or vapours.
P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/ eye protection/ face protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present 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.

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

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (%)
2-Butoxyethanol	111-76-2 203-905-0 603-014-00-0 01-2119475108-36	Acute Tox. 4; H302 Acute Tox. 3; H331 Skin Irrit. 2; H315 Eye Irrit. 2; H319 --- Acute toxicity estimate Acute oral toxicity: 1.200 mg/kg Acute inhalation toxicity (vapour): 3 mg/l 10,01 mg/l	>= 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 Dam. 1; H318	>= 1 - < 3
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 estimate Acute oral toxicity: 1.600 mg/kg	>= 0,1 - < 1

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 : 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.

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

Symptoms : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Risks : Harmful if swallowed.
Causes skin irritation.
Causes serious eye damage.
Toxic if inhaled.

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	:	Water spray may be ineffective unless used by experienced firefighters. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	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 separately in closed containments.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	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. Prevent unauthorised persons entering the zone.

6.2 Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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 application 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 ignition - 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, including any incompatibilities

Requirements for storage areas and containers	:	Prevent unauthorized access. No smoking. Keep in a well-ventilated place.
Storage class (TRGS 510)	:	6.1A
Further information on storage stability	:	No decomposition if stored and applied as directed.

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			
		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			
		MAK	10 ppm 49 mg/m3	DE DFG MAK
	Peak-limit: excursion factor (category): 2; I			
	Further information: Danger of absorption through the skin, Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed			
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			
		MAK (inhalable fraction)	1 mg/m3	DE DFG MAK
	Peak-limit: excursion factor (category): 1; I			
	Further information: Danger of sensitization of the skin, Substances that cause concern that they could be carcinogenic for man but cannot be assessed conclusively because of lack of data, Danger of absorption through the skin, Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed			

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
2-Butoxyethanol	111-76-2	butoxy acetic acid: 150 mg/g creatinine	In case of long-term exposure: after more than	TRGS 903

		(Urine)	one shift, Immediately after exposure or after working hours	

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Diethanolamine	Workers	Skin contact	Long-term systemic effects	0,13 mg/kg bw/day
	Workers	Inhalation	Long-term local effects	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 : Tightly fitting safety goggles
Hand protection
Material : Neoprene

Material : Nitrile rubber

Skin and body protection	:	Protective suit
Respiratory protection	:	In the case of vapour or aerosol formation use a respirator with an approved filter. Wear full face mask supplied with: Combination filter: ABEKP.

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
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Flash point	:	70,5 °C Method: Pensky-Martens closed cup
Decomposition temperature	:	No data available
pH	:	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
Vapour pressure	:	No data available
Relative density	:	No data available
Relative vapour density	:	No data available

9.2 Other information

Explosives	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Self-ignition	:	No data available
Evaporation rate	:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

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 products

No hazardous decomposition products are known.
Thermal decomposition : No data available

SECTION 11: Toxicological information

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

Information on likely routes of exposure : Eye contact
Skin contact

Acute toxicity

Harmful if swallowed.
Toxic if inhaled.

Product:

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

Components:

2-Butoxyethanol:

Acute oral toxicity : Acute toxicity estimate: 1.200 mg/kg
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

Acute inhalation toxicity : Acute toxicity estimate: 3 mg/l
Test atmosphere: vapour
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

Acute toxicity estimate: 10,01 mg/l
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : LD50 (Rabbit): > 2.000 - 5.000 mg/kg
Method: Calculation method
Remarks: Information taken from reference works and the literature.

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

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

2-Propylheptanol ethoxylate:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Remarks: Read-across (Analogy)

Diethanolamine:

Acute oral toxicity : LD50 (Rat): 1.600 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : Remarks: Not classified due to data which are conclusive although insufficient for classification.

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Causes skin irritation.

Components:

2-Butoxyethanol:

Result : Irritating to skin.

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

Species : Rabbit
Result : Skin irritation

2-Propylheptanol ethoxylate:

Result : No skin irritation

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 : Irritation to eyes, reversing within 21 days

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

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

2-Propylheptanol ethoxylate:

Result : Risk of serious damage to eyes.

Diethanolamine:

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

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Components:

Diethanolamine:

Test Type : Maximisation Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

Diethanolamine:

Genotoxicity in vitro : Test Type: Ames test
Result: negative

Genotoxicity in vivo : Test Type: Chromosome aberration test in vivo
Species: Mouse
Result: negative

Carcinogenicity

Not classified due to lack of data.

Components:

Diethanolamine:

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

Reproductive toxicity
Not classified due to lack of data.

Components:

Diethanolamine:

Reproductive toxicity - Assessment	:	Some evidence of adverse effects on development, based on animal experiments., Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

STOT - single exposure
Not classified due to lack of data.

Components:

Diethanolamine:

Assessment	:	Based on available data, the classification criteria are not met.

STOT - repeated exposure
Not classified due to lack of data.

Components:

Diethanolamine:

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

Aspiration toxicity
Not classified due to lack of data.

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.

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-unsatd., N,N-bis(hydroxyethyl):

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)): > 10 - 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l
Exposure time: 48 h

Diethanolamine:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

		Exposure time: 96 h Test Type: static test Remarks: Information taken from reference works and the literature.
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l Exposure time: 48 h Remarks: Information taken from reference works and the literature.
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 1 - 10 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 1,05 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: semi-static test

Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic to aquatic life.

12.2 Persistence and degradability

Components:

2-Butoxyethanol:

Biodegradability	:	Result: Readily biodegradable.
Biochemical Oxygen Demand (BOD)	:	Remarks: No data available

2-Propylheptanol ethoxylate:

Biodegradability	:	Result: Readily biodegradable. Method: OECD Test Guideline 301D
Biochemical Oxygen Demand (BOD)	:	Remarks: No data available

Diethanolamine:

Biodegradability	:	Result: Readily biodegradable.
Biochemical Oxygen Demand (BOD)	:	Remarks: No data available

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-unsatd., N,N-bis(hydroxyethyl):

Partition coefficient: n-octanol/water : log Pow: 1,35 - 4,84 (20 °C)

2-Propylheptanol ethoxylate:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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

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:

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.

Components:

2-Butoxyethanol:

Assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).. Substance is not very persistent and very bioaccumulative (vPvB).

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

Assessment : Remarks: Not applicable

2-Propylheptanol ethoxylate:

Assessment : This substance is not considered to be a PBT (Persistent, Bioaccumulation, Toxic). This substance is not considered to be vPvB (very Persistent nor very Bioaccumulating)

Diethanolamine:

Assessment : This substance is not considered to be a PBT (Persistent, Bioaccumulation, Toxic). This substance is not considered to be vPvB (very Persistent nor very Bioaccumulating)

12.6 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.

12.7 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of contents/container in accordance with local regula-

tion.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.

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

IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

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 manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3 Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	H2	ACUTE TOXIC

Water hazard class (Germany) : WGK 2 obviously hazardous to water
Classification according to AwSV, Annex 1 (5.2)

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 obligations/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
PICCS	:	Not in compliance 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 either listed on the TSCA Inventory or in compliance with a TSCA Inventory exemption.

15.2 Chemical safety assessment

2-Butoxyethanol	:	No information available.
2-Propylheptanol ethoxylate	:	A Chemical Safety Assessment is not required for this substance.
Diethanolamine	:	A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements

H302	:	Harmful if swallowed.
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 abbreviations

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
DE DFG MAK	:	Germany. MAK BAT Annex IIa
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 DFG MAK / MAK	:	MAK value
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 sub-

stance; 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
Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Aquatic 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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