

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## BEROL 6446

Version 1

Revision Date 17.05.2019

Print Date 15.07.2020

GB / EN

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Trade name : BEROL 6446

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

Use of the Substance/Mixture : Specific use(s): Emulsifier

#### 1.3 Details of the supplier of the safety data sheet

Company : Nouryon Surface Chemistry AB  
Stenunge Alle 3  
SE 444 85 Stenungsund  
Sweden

Telephone : +4630385000  
Telefax : +4630384659  
E-mail address : 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

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### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

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

Skin irritation, 2, H315  
Serious eye damage, 1, H318  
Reproductive toxicity, 2, H361fd  
Long-term (chronic) aquatic hazard, 2, H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

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


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Pictogram	:	
Signal word	:	Danger
Hazard statements	:	H315 Causes skin irritation. H318 Causes serious eye damage. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	:	<b>Prevention:</b> P201 Obtain special instructions before use. P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. <b>Response:</b> 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. P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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

Diethanolamide

## 2.3 Other hazards

No further data available.

PBT and vPvB 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.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures**

Pure substance/mixture : Mixture

**Hazardous substance**

Chemical name	PBT vPvB OEL	CAS-No. EC-No. REACH No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
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	>= 80 - < 90
2-Propylheptanol ethoxylate		160875-66-1	Eye Irrit. 2; H319	>= 10 - < 15
Diethanolamine		111-42-2 203-868-0 01-2119488930-28	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Repr. 2; H361fd STOT RE 2; H373	>= 3 - < 5

For the full text of the H-Statements mentioned in this Section, see Section 16.

**REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).**

Status : Not applicable

**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.
- If inhaled : If breathed in, move person into fresh air.  
Consult a physician after significant exposure.
- 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.  
Never give anything by mouth to an unconscious person.

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

Risks : Causes skin irritation.  
Causes serious eye damage.  
Suspected of damaging fertility. Suspected of damaging the unborn child.

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

Treatment : Treat symptomatically.

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### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting / Specific hazards arising from the chemical : Do not allow run-off from fire fighting to enter drains or water courses.  
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.

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### 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.

Emergency measures on accidental release : 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.  
If the product contaminates rivers and lakes or drains inform respective authorities.

## 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up /  
Methods for containment : 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.

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## 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.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Prevent unauthorized access.  
Keep container tightly closed in a dry and well-ventilated place.  
Reacts with copper, aluminium, zinc and their alloys.

Other data : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : No information available.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 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/m <sup>3</sup>
	Workers	Inhalation	Long-term systemic effects	0.75 mg/m <sup>3</sup>

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	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/m <sup>3</sup>

## 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 controls

Effective exhaust ventilation system

Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

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.

Hand protection : butyl-rubber

Eye protection : Tightly fitting safety goggles

Skin and body protection : Protective suit

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.  
When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

### Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

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Form	: liquid
Colour	: clear light yellow
Odour	: No information available.
Odour Threshold	: No data available

## Safety data

pH	: No data available
Melting point	: No data available
Boiling point	: No data available
Flash point	: 100 - 199 °C
Evaporation rate	: No data available
Flammability (solid, gas)	:
Flammability (liquids)	: Does not sustain combustion.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 994 kg/m <sup>3</sup> at 20 °C
Relative density	: No data available
Water solubility	: dispersible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, dynamic	: 1,200 mPa.s at 20 °C
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

## 9.2 Other information

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

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## 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

No dangerous reaction known under conditions of normal use.

### 10.4 Conditions to avoid

Conditions to avoid : None known.

### 10.5 Incompatible materials

Materials to avoid : None known.

### 10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.

Thermal decomposition : No data available

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## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Product information:

Acute toxicity : Not classified based on available information.

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/eye irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Respiratory sensitisation: Not classified based on available information.  
Skin sensitisation: Not classified based on available information.

Germ cell mutagenicity : Not classified based on available information.

Carcinogenicity : Not classified based on available information.

Reproductive toxicity : Suspected of damaging fertility. Suspected of damaging the unborn child.

STOT - single exposure : Not classified based on available information.

STOT - repeated exposure : Not classified based on available information.



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Aspiration hazard : Not classified based on available information.

Further information : Suspected of damaging fertility or the unborn child.

## Test result

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

## Toxicology data for the components:

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

#### Acute toxicity:

Acute oral toxicity : LD50: > 5,000 mg/kg  
Species: Rat  
Method: OECD Test Guideline 401

Skin corrosion/irritation : Species: Rabbit  
Result: Skin irritation

Serious eye damage/eye irritation : Species: Rabbit  
Result: Risk of serious damage to eyes.

### 2-Propylheptanol ethoxylate

#### Acute toxicity:

Acute oral toxicity : LD50: > 2,000 mg/kg  
Species: Rat  
Read-across (Analogy)

Skin corrosion/irritation : Result: No skin irritation

Serious eye damage/eye irritation : Result: Mild eye irritation

Respiratory or skin sensitisation : Result: Does not cause skin sensitisation.

Repeated dose toxicity : 250 mg/kg

Teratogenicity : > 250 mg/kg

### Diethanolamine

#### Acute toxicity:

Acute oral toxicity : LD50: 1,600 mg/kg  
Species: Rat  
Method: OECD Test Guideline 401

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

Acute dermal toxicity : No data available

Skin corrosion/irritation : Species: Rabbit  
Result: Irritating to skin.  
Method: OECD Test Guideline 404

Serious eye damage/eye : Species: Rabbit

irritation	Result: Risk of serious damage to eyes. Method: OECD Test Guideline 405
Respiratory or skin sensitisation	: Maximisation Test Species: Guinea pig Result: Does not cause skin sensitisation. Method: OECD Test Guideline 406
Germ cell mutagenicity	
Genotoxicity in vitro	: Ames test Result: negative
Genotoxicity in vivo	: Chromosome aberration test in vivo Species: Mouse Result: negative
Carcinogenicity	: Result: Not classified due to data which are conclusive although insufficient for classification.
CMR effectsReproductive toxicity	: 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	: Based on available data, the classification criteria are not met.
STOT - repeated exposure	: Exposure routes: Oral Target Organs: Blood, Liver, Kidney, Nervous system May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified due to data which are conclusive although insufficient for classification.

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## SECTION 12: ECOLOGICAL INFORMATION

### Product information:

#### Ecotoxicology Assessment

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life with long lasting effects.

### 12.1 Toxicity

#### Components:

#### Ecotoxicology Assessment

#### Diethanolamine

Short-term (acute) aquatic hazard : Toxic to aquatic life.

#### Test result

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

Toxicity to fish : LC50: 4.9 mg/l  
Exposure time: 96 h  
Species: Danio rerio (zebra fish)

LC50: 2.4 mg/l  
Exposure time: 96 h  
Species: *Oncorhynchus mykiss* (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates : EC50: 3.3 mg/l  
Exposure time: 24 h  
Species: *Daphnia magna* (Water flea)  
Test Type: static test

Toxicity to algae : NOEC: 2 mg/l  
Exposure time: 72 h  
Species: *Scenedesmus subspicatus* (algae)

## **2-Propylheptanol ethoxylate**

Toxicity to fish : LC50: > 1 - 10 mg/l  
Exposure time: 96 h  
Species: *Oncorhynchus mykiss* (rainbow trout)  
Read-across (Analogy)

Toxicity to daphnia and other aquatic invertebrates : EC50: > 1 - 10 mg/l  
Exposure time: 48 h  
Species: *Daphnia magna* (Water flea)  
Read-across (Analogy)

Toxicity to algae : EC50: > 10 - 100 mg/l  
Exposure time: 72 h  
Species: *Scenedesmus subspicatus* (algae)  
Read-across (Analogy)

## **Diethanolamine**

Toxicity to fish : LC50: > 100 mg/l  
Exposure time: 96 h  
Species: *Oncorhynchus mykiss* (rainbow trout)  
Test Type: static test  
Information taken from reference works and the literature.

Toxicity to daphnia and other aquatic invertebrates : EC50: > 10 - 100 mg/l  
Exposure time: 48 h  
Species: *Daphnia magna* (Water flea)  
Information taken from reference works and the literature.

Toxicity to algae : EC50: > 1 - 10 mg/l  
Exposure time: 96 h  
Species: *Pseudokirchneriella subcapitata* (green algae)

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

## **12.2 Persistence and degradability**

**Product information** : No information available.

**Components:****2-Propylheptanol ethoxylate**

Biodegradability : Result: Readily biodegradable.  
Read-across (Analogy)

**Diethanolamine**

Biodegradability : Result: Readily biodegradable.

**12.3 Bioaccumulative potential**

**Product information** : No information available.

**Components:****2-Propylheptanol ethoxylate**

Bioaccumulation : No data available

**Diethanolamine**

Bioaccumulation : Not expected considering the low log Pow value.

**12.4 Mobility in soil**

**Product information** : No information available.

**Components:****2-Propylheptanol ethoxylate**

Mobility : No data available

**Diethanolamine**

Mobility : Adsorption to the solid soil particles is not expected.  
Transport to air is not expected.

**12.5 Results of PBT and vPvB assessment****Product information:**

PBT and vPvB 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-Propylheptanol ethoxylate**

PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).  
This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Diethanolamine**

PBT and vPvB 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 Other adverse effects**

**Product information** : No information available.

**Components:****2-Propylheptanol ethoxylate**

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Biochemical Oxygen Demand (BOD) : No data available

## Diethanolamine

Biochemical Oxygen Demand (BOD) : No data available

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## 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.  
Hazardous waste  
Dispose of contents/container in accordance with local regulation.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.

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## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

- ADR : UN 3082  
RID : UN 3082  
IMDG-Code : UN 3082  
IATA-DGR : UN 3082

### 14.2 Proper shipping name

- ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Diethanolamide)
- RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Diethanolamide)
- IMDG-Code : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Diethanolamide)
- IATA-DGR : Environmentally hazardous substance, liquid, n.o.s.  
(Diethanolamide)

### 14.3 Transport hazard class

- ADR : 9  
RID : 9  
IMDG-Code : 9  
IATA-DGR : 9

### 14.4 Packing group

- ADR  
Packing group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9  
Tunnel restriction code : (-)  
RID

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Packing group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9

## IMDG-Code

Packing group : III  
Labels : 9  
EmS Code : F-A, S-F

## IATA-DGR

Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964  
Packing instruction (LQ) : Y964  
Packing group : III  
Labels : 9

### 14.5 Environmental hazards

#### ADR

Environmentally hazardous : yes

#### RID

Environmentally hazardous : yes

#### IMDG-Code

Marine pollutant : yes (Diethanolamide)

#### IATA-DGR

Environmentally hazardous : yes

### 14.6 Special precautions for user

Not applicable

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

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## SECTION 15: REGULATORY INFORMATION

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

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

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL HAZARDS	200 t	500 t

#### Notification status

DSL : YES. All components of this product are on the Canadian DSL  
AICS : YES. On the inventory, or in compliance with the inventory  
NZIoC : NO. Not in compliance with the inventory  
ENCS : YES. On the inventory, or in compliance with the inventory  
ISHL : YES. On the inventory, or in compliance with the inventory  
KECI : YES. On the inventory, or in compliance with the inventory  
PICCS : NO. Not in compliance with the inventory  
IECSC : YES. On the inventory, or in compliance with the inventory  
TCSI : YES. On the inventory, or in compliance with the inventory  
TSCA : YES. All chemical substances in this product are either listed on the

TSCA Inventory or in compliance with a TSCA Inventory exemption.

For explanation of abbreviation see section 16.

## 15.2 Chemical safety assessment

- 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.

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## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

- H302 : Harmful if swallowed.
- H315 : Causes skin irritation.
- H318 : Causes serious eye damage.
- H319 : Causes serious eye irritation.
- 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.

### Classification procedure:

Skin irritation, 2, H315, Calculation method

Serious eye damage, 1, H318, Calculation method

Reproductive toxicity, 2, H361fd, Calculation method

Long-term (chronic) aquatic hazard, 2, H411, Calculation method

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

## Further information

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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