

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 SDS Reference Number: 02426 Issue date: 4/9/2014 Revision date: 8/8/2024 Supersedes version of: 5/13/2016 Version: 1.0

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

Cd\*\*

### **1.1. Product identifier**

Product form
Trade name
EC Index-No.
EC-No.
CAS-No.
Product code
Type of product
Formula
Chemical structure

Substance
 CADMIUM SULPHATE 8/3 HYDRATE EXTRA PURE
 048-009-00-9
 233-331-6
 7790-84-3
 02426
 Inorganic compound
 CdOS4 · 8/3 H2O

Synonyms

: Cadmium (II) sulphate 8/3 hydrate

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

#### **Relevant identified uses**

Use of the substance/mixture

: Laboratory chemicals, Manufacture of substances

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

LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai INDIA T +91 22 6663 6663, F +91 22 6663 6699 info@lobachemie.com, www.lobachemie.com

1.4. Emergency telephone number

Emergency number

: + 91 22 6663 6663 (9:00am - 6:00 pm)

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 3	H301
Acute toxicity (inhal.), Category 2	H330
Germ cell mutagenicity, Category 1A	H340
Carcinogenicity, Category 1A	H350
Reproductive toxicity, Category 1A	H360
Specific target organ toxicity - Repeated exposure, Category 1	H372
Hazardous to the aquatic environment – Chronic Hazard,	H410
Category 1	
Full text of H- and ELIH-statements: see section 16	

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

May cause cancer. May cause genetic defects. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Fatal if inhaled. Toxic if swallowed. Very toxic to aquatic life with long lasting effects.

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## 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS06 GHS08 GHS09 Signal word (CLP) : Danger Hazard statements (CLP) : H301 - Toxic if swallowed. H330 - Fatal if inhaled. H340 - May cause genetic defects. H350 - May cause cancer. H360 - May damage fertility or the unborn child. H372 - Causes damage to organs through prolonged or repeated exposure. H410 - Very toxic to aquatic life with long lasting effects. Precautionary statements (CLP) : P201 - Obtain special instructions before use. P260 - Do not breathe vapours, dust, fume, gas. P273 - Avoid release to the environment. P284 - Wear respiratory protection. P301+P310 - IF SWALLOWED: Immediately call a doctor. P304+P340+P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type	: Mono-constituent	
Name	Product identifier	%
CADMIUM SULPHATE 8/3 HYDRATE	CAS-No.: 7790-84-3 EC-No.: 233-331-6 EC Index-No.: 048-009-00-9	100

r affected person to I keep at rest in a a doctor.
n with plenty of water.
es, if present and easy
nmediately.
uipment.
May cause genetic
or by contact in
Ma

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5 1	None under normal conditions. Dust from this product may cause eye irritation.
- )	Toxic if swallowed.
Chronic symptoms :	May cause cancer. May damage fertility or the unborn child.

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

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Carbon dioxide. Dry powder. Foam. Water spray.</li><li>Do not use a heavy water stream.</li></ul>
5.2. Special hazards arising from the subs	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>No fire hazard.</li> <li>No direct explosion hazard.</li> <li>Toxic fumes may be released.</li> </ul>
5.3. Advice for firefighters	
Firefighting instructions Protection during firefighting	<ul> <li>Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.</li> </ul>

SECTION 6: Accidental release measures		
6.1. Personal precautions, protect	ive equipment and emergency procedures	
General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.	
For non-emergency personnel		
Protective equipment	: Wear recommended personal protective equipment.	
Emergency procedures	: Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.	
For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Ventilate area. Evacuate unnecessary personnel.	
6.2 Environmental precautions		

Avoid release to the environment. Very toxic to aquatic life with long lasting effects. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up	
For containment	: Collect spillage.
Methods for cleaning up	: Mechanically recover the product. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling Hygiene measures	<ul> <li>Not expected to present a significant hazard under anticipated conditions of normal use.</li> <li>Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapours/spray.</li> <li>Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Separate working clothes from town clothes. Launder separately. Always wash hands after handling the product.</li> </ul>
7.2. Conditions for safe storage, including	any incompatibilities
Technical measures Storage conditions Packaging materials	<ul> <li>Keep in a cool, well-ventilated place away from heat.</li> <li>Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a well-ventilated place. Keep container tightly closed.</li> <li>Store always product in container of same material as original container.</li> </ul>
7.3. Specific end use(s)	

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls

**Appropriate engineering controls:** Ensure good ventilation of the work station.

### Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment symbol(s):



#### Eye and face protection

**Eye protection:** Chemical goggles or safety glasses

Skin protection

Skin and body protection: Wear a mask

Hand protection: Protective gloves

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#### **Respiratory protection**

#### **Respiratory protection:**

Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

#### **Environmental exposure controls**

Environmental exposure controls:

Avoid release to the environment.

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

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White.
Appearance	: Crystalline powder.
Molecular mass	: 256.57 g/mol
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: 41.5 °C
Freezing point	: Not applicable
Boiling point	: > 80 °C (decomposition)
Flammability	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 80 °C
рН	: 3 – 6 at 20 °C
pH solution concentration	: 5%
Viscosity, kinematic	: Not applicable
Solubility	: Water: 1130 g/l at 20 °C - Freely soluble
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 3.1 g/cm³ at 20 °C
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

#### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### **10.2. Chemical stability**

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid** 

Direct sunlight. Air contact. Moisture.

10.5. Incompatible materials

No additional information available

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## **10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological info	ormation
11.1. Information on hazard classe	s as defined in Regulation (EC) No 1272/2008
Acute toxicity (oral)	: Toxic if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Fatal if inhaled.
Skin corrosion/irritation	: Not classified
	pH: 3 – 6 at 20 °C
Serious eye damage/irritation	: Not classified
, ,	pH: 3 – 6 at 20 °C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
CADMIUM SULPHATE 8/3 HYDRATE EXTRA PURE (7790-84-3)	
Viscosity, kinematic	Not applicable
11.2. Information on other hazards	

#### **Other information**

Potential adverse human health effects and : Toxic if swallowed. symptoms

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general Ecology - water Hazardous to the aquatic environment, short–term (acute)	<ul><li>Very toxic to aquatic life with long lasting effects.</li><li>Very toxic to aquatic life with long lasting effects.</li><li>Not classified</li></ul>
Hazardous to the aquatic environment, long–term (chronic)	: Very toxic to aquatic life with long lasting effects.
12.2. Persistence and degradability	

CADMIUM SULPHATE 8/3 HYDRATE EXTRA PURE (7790-84-3)		
Persistence and degradability	Rapidly degradable	
12.3. Bioaccumulative potential		

No additional information available

12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

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# 12.6. Endocrine disrupting properties

## No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations	5
13.1. Waste treatment methods	
Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological information	: Hazardous waste due to toxicity.

# **SECTION 14: Transport information**

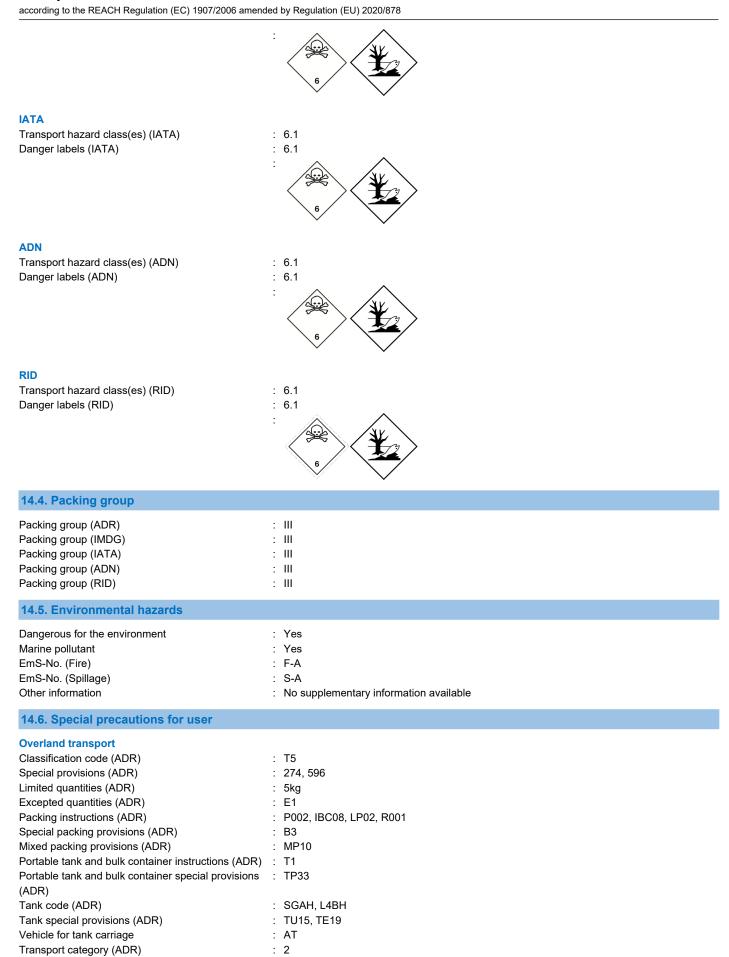
### In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number	
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	<ul> <li>: UN 2570</li> </ul>
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) Transport document description (ADR) Transport document description (IMDG) Transport document description (IATA) Transport document description (ADN) Transport document description (RID)	<ul> <li>CADMIUM COMPOUND</li> <li>CADMIUM COMPOUND</li> <li>Cadmium compound</li> <li>CADMIUM COMPOUND</li> <li>CADMIUM COMPOUND</li> <li>UN 2570 CADMIUM COMPOUND, 6.1, III, (E)</li> <li>UN 2570 CADMIUM COMPOUND, 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS</li> <li>UN 2570 Cadmium compound (CADMIUM SULPHATE 8/3 HYDRATE ), 6.1, III, ENVIRONMENTALLY HAZARDOUS</li> <li>UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS</li> <li>UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS</li> <li>UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS</li> </ul>
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR) Danger labels (ADR)	: 6.1 : 6.1 : 6
IMDG Transport hazard class(es) (IMDG)	: 6.1

Transport hazard class(es) (IMDG)	
Danger labels (IMDG)	

: 6.1

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Special provisions for carriage - Bulk (ADR) Special provisions for carriage - Loading, unloading and handling (ADR)	: VC1, VC2, AP7 : CV13, CV28
Special provisions for carriage - Operation (ADR)	: S9
Hazard identification number (Kemler No.) Orange plates	
	<u>60</u> 2570
Tunnel restriction code (ADR)	: E
EAC code	2X
Transport by sea	
Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Powder or crystals with various colours. May be soluble or insoluble in water. Toxic if
	swallowed, by skin contact or by dust inhalation.
MFAG-No	: 154
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y645
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 670
PCA max net quantity (IATA)	: 100kg
CAO packing instructions (IATA)	: 677
CAO max net quantity (IATA)	: 200kg
Special provisions (IATA)	: A3, A5
ERG code (IATA)	: 6L
Inland waterway transport	
Classification code (ADN)	: T5
Special provisions (ADN)	: 274, 596, 802
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: T5
Special provisions (RID)	: 274, 596
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAH, L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Bulk (RID)	: VC1, VC2, AP7
Special provisions for carriage - Loading, unloading	: CW13, CW28, CW31
and handling (RID)	,

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Colis express (express parcels) (RID)	:	CE11
Hazard identification number (RID)	:	60

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

Not applicable

## **SECTION 15: Regulatory information**

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

#### **EU-Regulations**

#### **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)			
Reference code Applicable on			
23.	CADMIUM SULPHATE 8/3 HYDRATE EXTRA PURE		
28.	CADMIUM SULPHATE 8/3 HYDRATE EXTRA PURE		
29.	CADMIUM SULPHATE 8/3 HYDRATE EXTRA PURE		
30.	CADMIUM SULPHATE 8/3 HYDRATE EXTRA PURE		

#### **REACH Annex XIV (Authorisation List)**

Not listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List

#### PIC Regulation (Prior Informed Consent)

Listed on the PIC list (Regulation EU 649/2012): cadmium sulphate hydrate (3:8)

### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

## Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

#### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### **National regulations**

#### France

Occupational diseases		
Code	Description	
RG 61	Occupational diseases caused by cadmium and its compounds	
RG 61 BIS	Bronchopulmonary cancer caused by the inhalation of dusts or fumes containing cadmium	

#### Germany

Water hazard class (WGK)

: WGK 3, Highly hazardous to water (Classification according to AwSV).

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Chemicals Prohibition Ordinance (ChemVerbotsV) Hazardous Incident Ordinance (12. BImSchV)	:	This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10). Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
Netherlands		
SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen – Borstvoeding SZW-lijst van reprotoxische stoffen – Vruchtbaarheid SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	The substance is not listed The substance is not listed The substance is not listed The substance is not listed The substance is not listed
Denmark		
Danish National Regulations	:	Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Abbreviations and acronyms:				
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			
ATE	Acute Toxicity Estimate			
BCF	Bioconcentration factor			
BLV	Biological limit value			
BOD	Biochemical oxygen demand (BOD)			
COD	Chemical oxygen demand (COD)			
DMEL	Derived Minimal Effect level			
DNEL	Derived-No Effect Level			
EC-No.	European Community number			
EC50	Median effective concentration			
EN	European Standard			
IARC	International Agency for Research on Cancer			
ΙΑΤΑ	International Air Transport Association			
IMDG	International Maritime Dangerous Goods			
LC50	Median lethal concentration			
LD50	Median lethal dose			
LOAEL	Lowest Observed Adverse Effect Level			
NOAEC	No-Observed Adverse Effect Concentration			
NOAEL	No-Observed Adverse Effect Level			
NOEC	No-Observed Effect Concentration			
OECD	Organisation for Economic Co-operation and Development			

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Abbreviations and acronyms:				
OEL	Occupational Exposure Limit			
PBT	Persistent Bioaccumulative Toxic			
PNEC	Predicted No-Effect Concentration			
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail			
SDS	Safety Data Sheet			
STP	Sewage treatment plant			
ThOD	Theoretical oxygen demand (ThOD)			
TLM	Median Tolerance Limit			
VOC	Volatile Organic Compounds			
CAS-No.	Chemical Abstract Service number			
N.O.S.	Not Otherwise Specified			
vPvB	Very Persistent and Very Bioaccumulative			
ED	Endocrine disruptor			

Full text of H- and EUH-statements:			
Acute Tox. 2 (Inhalation)	te Tox. 2 (Inhalation) Acute toxicity (inhal.), Category 2		
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3		
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1		
Carc. 1A	Carcinogenicity, Category 1A		
H301	Toxic if swallowed.		
H330	Fatal if inhaled.		
H340	May cause genetic defects.		
H350	May cause cancer.		
H360	May damage fertility or the unborn child.		
H372	H372 Causes damage to organs through prolonged or repeated exposure.		
H410	Very toxic to aquatic life with long lasting effects.		
Muta. 1A	Germ cell mutagenicity, Category 1A		
Repr. 1A	Reproductive toxicity, Category 1A		
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1		

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.