

## Safety Data Sheet

### PURTOP 400 M parte A

Safety Data Sheet dated: 04/02/2020 - version 2



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

### 1.1. Product identifier

Mixture identification:

Trade name: PURTOP 400 M parte A

Trade code: 9073563

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

Recommended use: Polyurethane membrane

Uses advised against: Data not available

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

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

### 1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)1684 299 886

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960

## SECTION 2: Hazards identification



### 2.1. Classification of the substance or mixture

#### Regulation (EC) n. 1272/2008 (CLP)

Eye Irrit. 2 Causes serious eye irritation.

STOT RE 2 May cause damage to organs through prolonged or repeated exposure .

Aquatic Chronic 2 Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

#### Regulation (EC) n. 1272/2008 (CLP)

#### Pictograms and Signal Words



Warning

#### Hazard statements:

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure .

H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements:

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P314 Get medical advice/attention if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with applicable regulations.

#### Contains:

diethylmethylbenzenediamine

#### Special provisions according to Annex XVII of REACH and subsequent amendments:

None

### 2.3. Other hazards

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

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## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Mixture identification: PURTOP 400 M parte A

#### Hazardous components within the meaning of the CLP regulation and related classification:

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥10 - <20 %	diethylmethylbenzenediamine	CAS:68479-98-1 EC:270-877-4 Index:612-130-00-0	STOT RE 2, H373; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H312	01-2119486805-25-XXXX
≥5 - <10 %	2,2' -oxybisethanol; diethylene glycol	CAS:111-46-6 EC:203-872-2 Index:603-140-00-6	Acute Tox. 4, H302; STOT RE 2, H373	01-2119457857-21-XXXX

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Do not inhale explosion and combustion gases.

### 5.3. Advice for firefighters

Use suitable breathing apparatus.

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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

## 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

## 6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

## 6.4. Reference to other sections

See also section 8 and 13

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

### 7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour Note	
2,2' -oxybisethanol; diethylene glycol	SUVA	NNN		44	10	176	40		
	NDS	NNN		10					
	National	SWEDEN		45	10	90	20	SWEDEN, Short-term value, 15 minutes average value	
	National	NORWAY		11	2,5	22	5		
	DFG	GERMANY	C			176	40		
	National	SWEDEN			45	10			
	National	DENMARK			11	2,5			
	National	GERMANY			44	10			
	NDS	POLAND			10				
	CHE	SWITZERLAN D					176	40	
	National	ESTONIA			45	10	90	20	
	National	LATVIA			10				
	National	SLOVAKIA	C				90		
	National	SLOVAKIA			44	10			
	National	SLOVENIA			44	10	176	40	
National	UNITED KINGDOM OF GREAT			101	23	303	69		

BRITAIN AND  
NORTHERN  
IRELAND

National BULGARIA	10			
National ROMANIA	500	115	800	184
National LITHUANIA	45	10	90	20
National CROATIA	101	23		

**Predicted No Effect Concentration (PNEC) values**

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
diethylmethylbenzenedia mine	68479-98-1	0,0005 mg/l	Fresh Water		
		0,00005 mg/l	Marine water		
		0,005 mg/l	Intermittent release		
		0,0029 mg/kg	Marine water		
2,2' -oxybisethanol; diethylene glycol	111-46-6	10 mg/l	Fresh Water		
		1 mg/l	Marine water		
		20,9 mg/kg	Freshwater sediments		
		1,53 mg/kg	Soil		
		10 mg/l	Intermittent release		
		2,09 mg/kg	Marine water sediments		
		199,5 mg/l	Microorganisms in sewage treatments		

**Derived No Effect Level. (DNEL)**

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark	
diethylmethylbenzenedia mine	68479-98-1	1 mg/kg			Human Dermal	Long Term, systemic effects		
		0,13 mg/m3			Human Inhalation	Long Term, systemic effects		
			0,1 mg/kg			Human Oral	Long Term, systemic effects	
			1 mg/kg			Human Dermal	Long Term, systemic effects	
			0,1 mg/m3			Human Inhalation	Long Term, systemic effects	
2,2' -oxybisethanol; diethylene glycol	111-46-6	53 mg/kg		53 mg/kg	Human Dermal	Long Term, systemic effects		
		60 mg/m3		12 mg/m3	Human Inhalation	Long Term, systemic effects		
		60 mg/m3		12 mg/m3	Human Inhalation	Long Term, local effects		

**8.2. Exposure controls**

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN 374:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Fluorinated rubber - FKM: thickness  $\geq 0,4\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: Liquid various

Odour: ammonia

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 300 °C (572 °F)

Flash point: N.A.

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.04 g/cm<sup>3</sup>

Solubility in water: Insoluble

Partition coefficient (n-octanol/water): N.A. - This product is a mixture

Auto-ignition temperature: N.A. - No explosive or spontaneous ignition in contact with air at room temperature

Decomposition temperature: N.A.

Viscosity: 1,060.00 cPs

Explosive properties: N.A. - No components with explosive properties

Oxidizing properties: N.A. - No component with oxidizing properties

Solid/gas flammability: N.A.

### 9.2. Other information

No additional information

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions

### 10.2. Chemical stability

Stable under normal conditions

### 10.3. Possibility of hazardous reactions

None.

### 10.4. Conditions to avoid

Stable under normal conditions.

### 10.5. Incompatible materials

None in particular.

### 10.6. Hazardous decomposition products

None.

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## SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

### Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

### Toxicological information on main components of the mixture:

diethylmethylbenzenedia mine	a) acute toxicity	LD50 Oral Rat = 738 mg/kg	
		LD50 Skin Rat > 2000 mg/kg	
		LD50 Skin Rabbit > 2000 mg/kg	21 d
		LD50 Skin Rabbit = 700 mg/kg	
		LD50 Oral Rat = 485 mg/kg	
2,2' -oxybisethanol; diethylene glycol	a) acute toxicity	LC50 Inhalation Rat > 4,6 mg/l 4h	
		LD50 Skin Rabbit > 2000 mg/kg	
		LC50 Inhalation Rat > 4600,00000 mg/m3 4h	
	g) reproductive toxicity	NOAEL Oral Mouse = 3060,00000 mg/kg	
		NOAEL Oral Rabbit = 1000,00000 mg/kg	

**If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.**

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- k) Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

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## SECTION 12: Ecological information

### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
diethylmethylbenzenediamine	CAS: 68479-98-1 - EINECS: 270-877-4 - INDEX: 612-130-00-0	a) Aquatic acute toxicity : LC50 Fish > 104 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia = 5,8 mg/L 48 a) Aquatic acute toxicity : EC50 Algae = 104 mg/L 72 a) Aquatic acute toxicity : LC50 Daphnia = 0,5 mg/L 48
2,2' -oxybisethanol; diethylene glycol	CAS: 111-46-6 - EINECS: 203-872-2 - INDEX: 603-140-00-6	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 24 a) Aquatic acute toxicity : EC50 Algae > 100 mg/L - 8 d

- b) Aquatic chronic toxicity : NOEC Fish > 100 mg/L - 7 d
- b) Aquatic chronic toxicity : NOEC Daphnia > 100 mg/L - 7 d
- e) Plant toxicity : EC50 = 11779 mg/kg
- b) Aquatic chronic toxicity : NOEC Algae = 2700 mg/L - 8 d
- a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 75200 mg/L 96h EPA
- a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 84000 mg/L 48h IUCLID

## 12.2. Persistence and degradability

N.A.

## 12.3. Bioaccumulative potential

N.A.

## 12.4. Mobility in soil

N.A.

## 12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

## 12.6. Other adverse effects

N.A.

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Product:

Do not dispose of waste into sewers.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to an authorized waste disposal service.

Contaminated packaging:

Empty remaining content.

Dispose of as unused product.

Do not re-use empty containers.

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## SECTION 14: Transport information

### 14.1. UN number

3082

### 14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diethylmethylbenzenediamine)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diethylmethylbenzenediamine)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diethylmethylbenzenediamine)

### 14.3. Transport hazard class(es)

ADR-Class: 9

IATA-Class: 9

IMDG-Class: 9

### 14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

### 14.5. Environmental hazards

Marine pollutant: Yes

Environmental Pollutant: Yes

### 14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR exempt: No

ADR-Label: 9

ADR-Hazard identification number: NA  
ADR-Special Provisions: 274 335 375 601  
ADR-Transport category (Tunnel restriction code): 3 (-)

**Air (IATA):**

IATA-Passenger Aircraft: 964  
IATA-Cargo Aircraft: 964  
IATA-Label: 9  
IATA-Subsidiary hazards: -  
IATA-Erg: 9L  
IATA-Special Provisions: A97 A158 A197

**Sea (IMDG):**

IMDG-Stowage Code: Category A  
IMDG-Stowage Note: -  
IMDG-Subsidiary hazards: -  
IMDG-Special Provisions: 274 335 969  
IMDG-Page: N/A  
IMDG-Label: N/A  
IMDG-EMS: F-A, S-F  
IMDG-MFAG: N/A

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

N.A.

These substances, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids, or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to provisions of ADR, IMDG and IATA DGR.

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**SECTION 15: Regulatory information**

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

VOC (2004/42/EC) : N.A. g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) 2015/830

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

<b>Seveso III category according to Annex 1, part 1</b>	<b>Lower-tier threshold (tonnes)</b>	<b>Upper-tier threshold (tonnes)</b>
Products belongs to category E2	200	500

**German Water Hazard Class**

N.A.

**Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:**

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: None

**SVHC Substances:**

No Data Available

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for the mixture.

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**SECTION 16: Other information**



Code	Description
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure .
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.9/2	STOT RE 2	Specific target organ toxicity – repeated exposure, Category 2
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

**Classification according to Regulation (EC) Nr. 1272/2008**

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.3/2	Calculation method
3.9/2	Calculation method
4.1/C2	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
IC50: half maximal inhibitory concentration  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
IRCCS: Scientific Institute for Research, Hospitalization and Health Care  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
LDLo: Leathal Dose Low  
N.A.: Not Applicable  
N/A: Not Applicable  
N/D: Not defined/ Not available  
NA: Not available  
NIOSH: National Institute for Occupational Safety and Health  
NOAEL: No Observed Adverse Effect Level  
OSHA: Occupational Safety and Health Administration.  
PBT: Persistent, Bioaccumulative and Toxic  
PGK: Packaging Instruction  
PNEC: Predicted No Effect Concentration.  
PSG: Passengers  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
vPvB: Very Persistent, Very Bioaccumulative.  
WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- 2. HAZARDS IDENTIFICATION
- 5. FIRE-FIGHTING MEASURES
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION