

**Safety Data Sheet**  
**TRIBLOCK P comp. B**

Safety Data Sheet dated 3/25/2019 version 1



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

**1.1. Product identifier**

Mixture identification:

Trade name: TRIBLOCK P comp. B

Trade code: 901117

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

Recommended use: Hardener for epoxy products

Uses advised against: N.A.

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

Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel: +39-02-376731

Fax: +39-02-37673.214

Responsible: sicurezza@mapei.it

**1.4. Emergency telephone number**

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)

**SECTION 2: Hazards identification**



**2.1. Classification of the substance or mixture**

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

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2 Causes serious eye irritation.

Skin Sens. 1 May cause an allergic skin reaction.

Aquatic Chronic 3 Harmful 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:**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash ... thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

P302+P352 IF ON SKIN: Wash with plenty of water/...

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see ... on this label).

P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to ... .

**Contains:**

3-aminomethyl-3,5,5-trimethylcyclohexylamine

m-xylylenediamine	May produce an allergic reaction.
3-aminopropyltriethoxysilane	May produce an allergic reaction.
2,4,6-tris(dimethylaminomethyl)phenol	May produce an allergic reaction.

**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

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

**3.1. Substances**

N.A.

**3.2. Mixtures**

Mixture identification: TRIBLOCK P comp. B

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

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥5 - <10 %	aliphatic polyamine	EC:polimero	Aquatic Chronic 2, H411	
≥1 - <2.5 %	3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067-00-9	Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1,1A,1B, H317; Aquatic Chronic 3, H412; Acute Tox. 4, H302; Acute Tox. 4, H312	01-2119514687-32-XXXX
≥1 - <2.5 %	m-xylylenediamine	CAS:1477-55-0 EC:216-032-5	Acute Tox. 4, H332; Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1,1A,1B, H317; Aquatic Chronic 3, H412, EUH071	01-2119480150-50-xxxx
≥0.25 - <0.49 %	3-aminopropyltriethoxysilane	CAS:919-30-2 EC:213-048-4	Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317	01-2119480479-24-xxxx
≥0.25 - <0.49 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9	Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1B, H317	01-2119560597-27-XXXX

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing.
- 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
- Skin Irritation
- Erythema

### 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.

Burning produces heavy smoke.

### 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/m <sup>3</sup>	Long Term ppm	Short Term mg/m <sup>3</sup>	Short Term ppm	Behaviour	Note
m-xylenediamine	ACGIH	NNN	C			0,1			Skin - Eye, skin, and GI irr
	National	FINLAND				0,1			FINLAND, takvärde,

	National NORWAY	0,1			
	National NORWAY	0,1	0,02	0,1	0,02
3-aminopropyltriethoxysilane	National FINLAND	28	3	55	6

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

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	0,06 mg/l	Fresh Water		
		1,121 mg/kg	Soil		
		0,006 mg/l	Marine water		
		5,784 mg/kg	Freshwater sediments		
		0,578 mg/kg	Marine water sediments		
		0,23 mg/l	Intermittent release		
		3,18 mg/l	Microorganisms in sewage treatments		
m-xylylenediamine	1477-55-0	0,094 mg/kg	Fresh Water		
		0,0094 mg/l	Marine water		
		0,43 mg/kg	Freshwater sediments		
		0,043 mg/kg	Marine water sediments		
		0,152 mg/l	Intermittent release		
		0,045 mg/kg	Soil		
		10 mg/l	Microorganisms in sewage treatments		
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	0,084 mg/l	Fresh Water		
		0,0084 mg/l	Marine water		
		0,2 mg/l	Microorganisms in sewage treatments		

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

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2			0,526 mg/kg	Human Oral	Long Term, systemic effects	

m-xylylenediamine	1477-55-0	0,33 mg/kg	Human Dermal	Long Term, systemic effects
		1,2 mg/m3	Human Inhalation	Long Term, systemic effects
		0,2 mg/m3	Human Inhalation	Long Term, local effects
2,4,6- tris (dimethylaminometh yl)phenol	90-72-2	4,9 mg/m3	Human Inhalation	Long Term, local effects
		0,31 mg/m3	Human Inhalation	Long Term, systemic 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.

N.A.

### 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 transparent

Odour: characteristic

Odour threshold: N.A.

pH: 9.00

Melting point / freezing point: 0 °C (32 °F)

Initial boiling point and boiling range: >100 °C (>212 °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: 1.03 g/cm<sup>3</sup>

Solubility in water: Dispersible

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: 85.00 cPs

Explosive properties: == - 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

## 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:

aliphatic polyamine	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg LD50 Skin Rabbit > 2000 mg/kg	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	a) acute toxicity	LD50 Oral Rat = 1030 mg/kg LC50 Inhalation Rat = 5,01 mg/l 4h LD50 Skin Rabbit > 2000 mg/kg	
	g) reproductive toxicity	NOAEL Oral Rat = 250 mg/kg NOAEL Oral Rat = 50 mg/kg	
m-xylylenediamine	a) acute toxicity	LD50 Oral Mouse = 930 mg/kg LD50 Skin Rabbit = 2000 mg/kg LC50 Inhalation Rat = 2,4 mg/l 4h	
3-aminopropyltriethoxysilane	a) acute toxicity	LD50 Oral Rat = 2830 mg/kg	ratto maschio
		LD50 Oral Rat = 1570 mg/kg LD50 Skin Rabbit = 4290 mg/kg	ratto femmina
2,4,6-tris(dimethylaminomethyl)phenol	a) acute toxicity	LD50 Oral Rat = 2169 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
- i) STOT-repeated exposure

**SECTION 12: Ecological information****12.1. Toxicity**

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

Eco-Toxicological Information:

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

**List of components with eco-toxicological properties**

Quantity	Component	Ident. Numb.	Ecotox Infos
>=1 - <2.5 %	3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS: 2855-13-2 - EINECS: 220-666-8 - INDEX: 612-067-00-9	a) Aquatic acute toxicity : LC50 Fish = 110 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia = 23 mg/L 48 a) Aquatic acute toxicity : NOEC Daphnia = 8,3 mg/L 48 b) Aquatic chronic toxicity : NOEC Daphnia = 3 mg/L - 21 d a) Aquatic acute toxicity : EC50 Algae > 50 mg/L 72 a) Aquatic acute toxicity : NOEC Algae = 1,5 mg/L 72
>=1 - <2.5 %	m-xylylenediamine	CAS: 1477-55-0 - EINECS: 216-032-5	a) Aquatic acute toxicity : EC50 Algae = 20 mg/L 72  a) Aquatic acute toxicity : EC50 Daphnia = 15,2 mg/L 48 a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96 a) Aquatic acute toxicity : LC50 Fish = 87,6 mg/L 96
>=0.25 - <0.49 %	3-aminopropyltriethoxysilane	CAS: 919-30-2 - EINECS: 213-048-4	a) Aquatic acute toxicity : LC50 Fish > 934 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia = 331 mg/L 48 a) Aquatic acute toxicity : EC50 Algae = 603 mg/L 72
>=0.25 - <0.49 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS: 90-72-2 - EINECS: 202-013-9	a) Aquatic acute toxicity : LC50 Fish = 222 mg/L 24  a) Aquatic acute toxicity : LC50 Fish = 249 mg/L 24 a) Aquatic acute toxicity : LC50 Fish = 175 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia = 718 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 84 mg/L 72 b) Aquatic chronic toxicity : NOEC Algae = 6,25 mg/L

**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.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Recover if possible. In so doing, comply with the local and national regulations currently in force.

**SECTION 14: Transport information**

Not classified as dangerous in the meaning of transport regulations.

**14.1. UN number**

N.A.

**14.2. UN proper shipping name**

N.A.

**14.3. Transport hazard class(es)**

N.A.

**14.4. Packing group**

N.A.

**14.5. Environmental hazards**

N.A.

**14.6. Special precautions for user**

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

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

N.A.

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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.

PRODUCT REGISTER NUMBER : NA

MAL KODE: NA

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):

N.A.

**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

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
EUH071	Corrosive to the respiratory tract.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.



H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

<b>Code</b>	<b>Hazard class and hazard category</b>	<b>Description</b>
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1-1A-1B	Skin Sens. 1,1A,1B	Skin Sensitisation, Category 1,1A,1B
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

**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 procedure**

3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1	Calculation method
4.1/C3	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

VOC: 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  
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.