



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

### 1.1 Product identifier

Trade name: **Zwaluw FireProtect FP PU Foam**

Article number: NBS

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

No further relevant information available.

### Application of the substance / the mixture

Filling cavities between solid components of metal or mineral building materials. Joint depth and width up to 40 mm.

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

#### Manufacturer/Supplier:

Debratec GmbH

Industriestraße 1-7

D-01936 Schwepnitz

www.debratec.de

mail@debratec.de

Tel. +49 (0)35797 646 0

Fax +49 (0)35797 646 190

1.4 Emergency telephone number: +49 (0) 35797 646 0 (Mo-Fr, 7-16 Uhr, in German)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

#### Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xn; Harmful

R20-40-48/20: Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

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F+; Extremely flammable

R12: Extremely flammable.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurised container.

The gas may be invisible and may enter sewers, basements or confined spaces.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02

GHS07

GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomeres and homologues

· **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

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

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves / eye protection.

P271 Use only outdoors or in a well-ventilated area.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of soap and 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.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Contains isocyanates. May produce an allergic reaction.

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Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

### 2.3 Other hazards

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

When transported by motorcar or truck cans have to stand upright in the boot or on the loading space - not in car interior.

Only unreacted formulation or fresh foam is harmful.

In use, may form flammable/ explosive vapour-air mixture.

### Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

#### Dangerous components:

CAS: 9016-87-9 Reg.nr.: 01-2119457024-46-xxxx	diphenylmethanediisocyanate, isomers and homologues ☒ Xn R20-40-48/20; ☒ Xn R42/43; ☒ Xi R36/37/38 Carc. Cat. 3 ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; ⚠ Skin Sens. 1, H317; STOT SE 3, H335	25-50%
CAS: 13674-84-5 EINECS: 237-158-7 Reg.nr.: 01-2119486772-26-xxxx	tris(2-chlorisopropyl)-phosphate ☒ Xn R22 ⚠ Acute Tox. 4, H302	< 20%
CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8 Reg.nr.: 01-2119472128-37-xxxx	dimethyl ether ⚠ F+ R12 ⚠ Flam. Gas 1, H220; Press. Gas C, H280	3-<10%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0	isobutane ⚠ F+ R12 ⚠ Flam. Gas 1, H220; Press. Gas C, H280	3-<10%
CAS: 36483-57-5 EINECS: 253-057-0	Tribromneopentylalkohol ☒ Xi R36 ⚠ Eye Irrit. 2, H319	1-≤2.5%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	propane ⚠ F+ R12 ⚠ Flam. Gas 1, H220; Press. Gas C, H280	1-≤2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information:

Immediately remove any clothing soiled by the product.

Personal protection for the First Aider.

Position and transport stably in side position. Keep patient warm.

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- **After inhalation:**  
Take affected persons into fresh air and keep quiet.  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation. Keep patient warm.
- **After skin contact:**  
If skin irritation continues, consult a doctor.  
Consult a doctor if skin irritation persists.  
Remove fresh foam gently mechanically.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do.  
Continue rinsing. Then consult a doctor.
- **After swallowing:**  
Seek medical treatment.  
Inform doctor. Do not give milk or fatty oils.  
Drink plenty of water and provide fresh air.
- **4.2 Most important symptoms and effects, both acute and delayed**  
skin dehydration and decoloration  
skin decoloration  
Effect on central nervous system. Further hazardous properties can not be excluded. Exposure can result in time-delayed symptoms.  
Asthma. In case of sensitization concentrations well below the OEL value can result in symptoms of asthma.  
Headache. Breathlessness and cough. Irritation of nose and throat  
Cough, shortness of breath and asthma. Headache.  
Dermatitis, skin discoloration and drying of the skin. Allergic contact eczema.  
Irritation of the nose and throat. Effect on the central nervous system.
- **Hazards**  
In case of respiratory sensitization concentrations below the threshold can trigger asthmatic symptoms.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
Delayed effects from exposure can be expected. Further hazardous properties can not be excluded.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.  
Foam
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Nitrogen oxides (NO<sub>x</sub>)  
Can form explosive gas-air mixtures.  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Hydrogen chloride (HCl)  
Hydrogen cyanide (HCN) (traces)  
Danger of bursting by heating.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Cool endangered receptacles with water spray and remove it out of emergency area if possible.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away. Do not flush with water or aqueous cleansing agents.  
Ensure adequate ventilation.

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- Keep away from ignition sources.
- **6.2 Environmental precautions:**
  - Do not allow product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
  - Dispose contaminated material as waste according to item 13.
  - Allow to solidify. Pick up mechanically.
  - Ensure adequate ventilation.
  - Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.
  - Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
  - Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
  - Do not spray onto a naked flame or any incandescent material.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
  - Store only in the original receptacle.
  - Observe official regulations on storing packagings with pressurised containers.
  - Store in a cool location under dry conditions in well sealed receptacles
- **Information about storage in one common storage facility:**
  - Do not store together with acids or alkalis (caustic solutions).
  - Store away from oxidising agents.
  - Not required.
- **Further information about storage conditions:**
  - Store in cool, dry conditions in well sealed receptacles.
  - Protect from heat and direct sunlight.
  - Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
  - Do not store together with oxidizing and self-igniting material.

## SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· <b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>9016-87-9 diphenylmethanediisocyanate, isomeres and homologues</b>	
WEL	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
<b>115-10-6 dimethyl ether</b>	
WEL	Short-term value: 958 mg/m <sup>3</sup> , 500 ppm Long-term value: 766 mg/m <sup>3</sup> , 400 ppm

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· DNELs		
<b>13674-84-5 tris(2-chlorisopropyl)-phosphate</b>		
Dermal	wrks, long, system	2.08 mg/kg/d (mouse)
	wrks, short, system	8.0 mg/kg bw/d (mouse)
Inhalative	wrks, long, system	5.82 mg/m <sup>3</sup> (mouse)
	wrks, short, system	22.4 mg/m <sup>3</sup> (rat)
<b>115-10-6 dimethyl ether</b>		
Inhalative	cstm, long, system	497 mg/m <sup>3</sup> (rat)
	wrks, long, system	1894 mg/m <sup>3</sup> (rabbit)
· PNECs		
<b>13674-84-5 tris(2-chlorisopropyl)-phosphate</b>		
Oral	fresh water	0.064 mg/l (daphnia)
	STP	7.84 mg/l (daphnia)
	marine water	0.064 mg/l (daphnia)
	sediment (fresh water)	13.4 mg/(kg dw) (daphnia)
	sediment (marine water)	1.34 mg/(kg bw) (daphnia)
	soil	1.7 mg/(kg dw) (daphnia)
<b>115-10-6 dimethyl ether</b>		
Oral	fresh water	0.155 mg/l (daphnia)
	STP	160.0 mg/l (daphnia)
	intermittent release	1.549 mg/l (daphnia)
	marine water	0.016 mg/l (daphnia)
	sediment (fresh water)	0.681 mg/(kg dw) (daphnia)
	sediment (marine water)	0.069 mg/(kg bw) (daphnia)
	soil	0.045 mg/(kg dw) (daphnia)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Short term filter device:

Filter AX

In case of brief exposure or low pollution use respiratory filter device, e.g. EN 14387 type ABEK). In case of intensive or longer exposure use self-contained respiratory protective device. Respiratory protective equipment (RPE) should not be needed for routine tasks. Keep any RPE clean, and replace at recommended intervals.

Biological monitoring by urine testing is recommended to assess exposure to isocyanate and the effectiveness of controls such as RPE and safe working procedures. This means taking samples of urine once or twice a year of workers that may have breathed in spray or vapour, and from unprotected workers nearby. Urine samples should be collected immediately the task has finished.

· **Protection of hands:**

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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**Material of gloves**

Recommended thickness of the material:  $\geq 0.5$  mm

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed goggles

· **Body protection:** Protective work clothing

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**
**General Information**
**Appearance:**

· <b>Form:</b>	Aerosol
· <b>Colour:</b>	According to product specification
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

**Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	Not applicable, as aerosol.

· **Flash point:**  $< 100$  °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 235 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**Explosion limits:**

· <b>Lower:</b>	1.7 Vol %
· <b>Upper:</b>	18.6 Vol %

· **Vapour pressure at 20 °C:** 6 bar

· <b>Density at 20 °C:</b>	1.06 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not applicable.

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

· <b>Kinematic:</b>	Not determined.
· <b>Organic solvents:</b>	0.6 %
· <b>VOC (EC)</b>	15.80 %
· <b>VOCV (CH)</b>	15.20 %

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· **9.2 Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Forms explosive gas mixture with air.  
Danger of bursting.
- **10.4 Conditions to avoid**  
No further relevant information available.  
Heating, open flame, ignition sources.  
See section 7 for information on safe handling.  
Keep away from ignition sources, fire, and heating.
- **10.5 Incompatible materials:** Acids, bases, oxidizing agents. Amines and alcohols. Polyols and water.
- **10.6 Hazardous decomposition products:**  
No dangerous decomposition products occur when handling in accordance with the rules.  
No decomposition if used according to specifications.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
  - **Acute toxicity:**
  - **LD/LC50 values relevant for classification:**
- | 9016-87-9 diphenylmethanediisocyanate, isomers and homologues |          |                      |
|---|----------|----------------------|
| Oral  | LD50     | >5000 mg/kg (rat)    |
| Dermal  | LD50     | >5000 mg/kg (rabbit) |
| Inhalative  | LC50/4 h | 0.49 mg/l (rat)      |
| 13674-84-5 tris(2-chlorisopropyl)-phosphate                   |          |                      |
| Oral  | LD50     | 3600 mg/kg (rat)     |
| 115-10-6 dimethyl ether                                       |          |                      |
| Inhalative  | LC50/4 h | 308 mg/l (rat)       |
- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** No irritating effect.
  - **Sensitisation:**  
Sensitization possible through inhalation or skin contact.  
Sensitisation possible through skin contact.
  - **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant
  - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
Carc. 2

## SECTION 12: Ecological information

- **12.1 Toxicity** No further relevant informations available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.

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- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 05 00	wastes not otherwise specified in 08
08 05 01*	waste isocyanates
16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing dangerous substances
17 00 00	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 06 00	insulation materials and asbestos-containing construction materials
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

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

- **ADR**



- **Class** 2 5F Gases.

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· Label 2.1

· IMDG, IATA



· Class 2.1

· Label 2.1

· 14.4 Packing group

· ADR, IMDG, IATA Void

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Warning: Gases.

· Danger code (Kemler):

-

· EMS Number:

F-D,S-U

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

· Transport category

2

· Tunnel restriction code

D

· IMDG

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

· UN "Model Regulation":

UN1950, AEROSOLS, 2.1

## SECTION 15: Regulatory information

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

· National regulations:

· Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

· Technical instructions (air):

Class	Share in %
I	25-50
NK	2.5-<3

· Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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### · Relevant phrases

- H220 Extremely flammable gas.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.
  
- R12 Extremely flammable.
- R20 Harmful by inhalation.
- R22 Harmful if swallowed.
- R36 Irritating to eyes.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R40 Limited evidence of a carcinogenic effect.
- R42/43 May cause sensitisation by inhalation and skin contact.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

### · Abbreviations and acronyms:

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ctsm, long, system: general population, long-term exposure, systematic effects
- ctsm, short, system: general population, acute / short-term exposure, systematic effects
- wrks, long, system: workers, long-term exposure - systemic effects
- wrks, short, system: workers, acute / short-term exposure - systemic effects
- ctsm, long, local: general population, long-term exposure, local effects
- STP: sewage treatment plant
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
- VOC: Volatile Organic Compounds (USA, EU)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Flam. Gas 1: Flammable gases, Hazard Category 1
- Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
- Press. Gas C: Gases under pressure: Compressed gas
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Carc. 2: Carcinogenicity, Hazard Category 2
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

### · \* Data compared to the previous version altered.