

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

1.1. Product identifier

Product form Trade name Type of product Vaporizer

- : Mixture
- : POINT Penoplast
- : Adhesives, Sealants
- : Aerosol

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

1.2.1. Relevant identified uses

Intended for general public Use of the substance/mixture

: Insulation product in construction applications.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

UAB TEGRA STATE

Savanoriu ave 178A, LT-03154 Vilnius, LITHUANIA Tel.:+37052661167 www.tegrastate.eu E-mail: info@tegragroup.eu

1.4. Emergency telephone number

Emergency number

: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aerosol, Category 1	H222;H229
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Reproductive toxicity, Additional category, Effects on or via	H362
lactation	



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Specific target organ toxicity – Single exposure, Category 3,H335Respiratory tract irritationSpecific target organ toxicity – Repeated exposure, Category 2H373Hazardous to the aquatic environment – Chronic Hazard, Category H413

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

Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. Suspected of causing cancer. May cause harm to breast-fed children. May cause damage to organs through prolonged or repeated exposure. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Harmful if inhaled. Harmful to aquatic life with long lasting effects. May cause long lasting harmful effects to aquatic life.

2.2. Label elements

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

Hazard pictograms (CLP)

	GHSo2 GHSo7 GHSo8
0	: Danger
Contains	: Reaction products of phosphoryl trichloride and 2-methyloxirane; alkanes, C14-17, chloro; chlorinated paraffins, C14-17
Hazard statements (CLP)	: H222 - Extremely flammable aerosol.
	H229 - Pressurised container: May burst if heated.
	H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H319 - Causes serious eye irritation.
	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335 - May cause respiratory irritation.
	H351 - Suspected of causing cancer.
	H362 - May cause harm to breast-fed children.
	H373 - May cause damage to organs through prolonged or repeated exposure.
	H413 - May cause long lasting harmful effects to aquatic life.
Precautionary statements (CLP)	: P102 - Keep out of reach of children.
	P201 - Obtain special instructions before use.
	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.
	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
	P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
	P101 - If medical advice is needed, have product container or label at hand.
	P501 - Dispose of contents/container to hazardous or special waste collection point, in
	accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH204 - Contains isocyanates. May produce an allergic reaction.



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Extra phrases	As from 24 August 2023 adequate training is required before industrial or professional use. 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.
Child-resistant fastening	: Not applicable
Tactile warning	: Applicable

2.3. Other hazards

Contains PBTvPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	chloroparaffines, C14-17 (85535-85-9)
Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	chloroparaffines, C14-17 (85535-85-9)
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Polymethylene polyphenyl isocyanate (9016-87-9), dimethyl ether (115-10-6), ethanediol; ethylene glycol (107-21-1), Reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Polymethylene polyphenyl isocyanate (9016-87-9), dimethyl ether (115-10-6), ethanediol; ethylene glycol (107-21-1), Reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	Polymethylene polyphenyl isocyanate (9016-87-9), dimethyl ether (115-10-6), chloroparaffines, C14-17 (85535-85-9), Reaction products of phosphoryl trichloride and 2-methyloxirane (1244733- 77-4), ethanediol; ethylene glycol (107-21-1)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable



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3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Polymethylene polyphenyl isocyanate	CAS-No.: 9016-87-9	≥ 45 - < 50	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
dimethyl ether substance with a Community workplace exposure limit (Note U)	CAS-No.: 115-10-6 EC-No.: 204-065-8 EC Index-No.: 603-019-00-8	≥ 10 - < 15	Flam. Gas 1A, H220 Press. Gas
chloroparaffines, C14-17 substance listed on REACH Candidate List (Medium-chain chlorinated paraffins (MCCP)) PBT substance; vPvB substance	CAS-No.: 85535-85-9 EC-No.: 287-477-0 EC Index-No.: 602-095-00-X REACH-no: 01-2119519269-33	≥ 5 - < 10	Lact., H362 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
Reaction products of phosphoryl trichloride and 2- methyloxirane	CAS-No.: 1244733-77-4 EC-No.: 807-935-0	≥1-<5	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Chronic 3, H412
ethanediol; ethylene glycol substance with a Community workplace exposure limit	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	< 0,5	Acute Tox. 4 (Oral), H302

Comments

: Polymethylene polyphenyl isocyanate, contains > 0.1% MDI-isomers.

Note U:When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas,
refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to
be assigned case by case. The following codes are assigned:. Press. Gas (Comp.), Press. Gas (Liq.), Press. Gas (Ref. Liq.), Press. Gas
(Diss.). Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

Product subject to CLP Article 1.1.3.7. The disclosure rules of the components is modified in this case. Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.



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First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to
	do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed	

Symptoms/effects after inhalation	: May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact: Eye irritation.Symptoms/effects after ingestion: None under normal conditions.

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	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection.

Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing
	apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
6.1.1. For non-emergency personnel	
Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe
	dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.



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6.1.2. For emergency responders

Protective	equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures

refer to section 8: "Exposure controls/personal protection". : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment Methods for cleaning up Other information	 Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. Mechanically recover the product. Notify authorities if product enters sewers or public waters. Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling	 Not expected to present a significant hazard under anticipated conditions of normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact during pregnancy/while nursing. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well- ventilated area. Avoid contact with skin and eyes.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed

7.2. Conditions for safe storage, including any incompatibilities

7.3. Specific end use(s)	
Packaging materials	: Store always product in container of same material as original container.
	Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up.
Technical measures	: Keep in a cool, well-ventilated place away from heat.

No additional information available



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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Polymethylene polyphenyl isocyanate (9016-87-9)		
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA)	0,02 mg/m³	
WEL STEL (OEL STEL)	0,07 mg/m³	
dimethyl ether (115-10-6)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Dimethylether	
IOEL TWA	1920 mg/m³	
	1000 ppm	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Belgium - Occupational Exposure Limits		
OEL TWA	1920 mg/m³	
	1000 ppm	
France - Occupational Exposure Limits		
VME (OEL TWA)	1920 mg/m³	
	1000 ppm	
Netherlands - Occupational Exposure Limits		
TGG-8u (OEL TWA)	950 mg/m³	
	496 ppm	
TGG-15min (OEL STEL)	1500 mg/m³	
	783 ppm	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA)	766 mg/m³	
	400 ppm	
WEL STEL (OEL STEL)	958 mg/m³	
	500 ppm	



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ethanediol; ethylene glycol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m ³
	20 ppm
IOEL STEL	104 mg/m³
	40 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing



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Hand protection: Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection: [In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. 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	: Liquid
Colour	: light pink.
Appearance	: Liquid under pressure.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Extremely flammable aerosol.
Explosive properties	: Pressurised container: May burst if heated.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not applicable
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 21 – 25 kg/m³
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable



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9.2. Other information

9.2.1. Information with regard to physical hazard classes

% of flammable ingredients

: 18,52 %

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (dermal) :	Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)	
Polymethylene polyphenyl isocyanate (9016-87-9)		
LD50 oral rat	> 10000 mg/kg (Rat, Literature study, Oral)	
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study, Dermal)	
LC50 Inhalation - Rat (Dust/Mist)	0,31 mg/l/4h	
dimethyl ether (115-10-6)		
LC50 Inhalation - Rat [ppm]	164000 ppm (4 h, Rat, Male, Experimental value, Inhalation (gases), 14 day(s))	



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ethanediol; ethylene glycol (107-21-1)		
LD50 oral rat	250 oral rat 7712 mg/kg bodyweight Animal: rat	
Reaction products of phosphoryl trichloride an	d 2-methyloxirane (1244733-77-4)	
LD50 oral rat	550 mg/kg	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))	
LC50 Inhalation - Rat	> 20 mg/l/4h Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: OECD Guideline 433 draft (Acute Inhalation Toxicity: Fixed Concentration Procedure) (not officially approved)	
chloroparaffines, C14-17 (85535-85-9)		
LD50 oral rat	> 4000 mg/kg bodyweight Animal: rat, Remarks on results: other:	
LD50 dermal rabbit	> 13500 mg/kg bodyweight (24 h, Rabbit, Read-across, Dermal)	
LC50 Inhalation - Rat	> 48,17 mg/l air (1 h, Rat, Read-across, Inhalation (vapours))	
Skin corrosion/irritation	: Causes skin irritation.	
Polymethylene polyphenyl isocyanate (9016-87	-9)	
рН	No data available in the literature	
dimethyl ether (115-10-6)		
рН	Not applicable (gas)	
Serious eye damage/irritation	: Causes serious eye irritation.	
Polymethylene polyphenyl isocyanate (9016-87	-9)	
рН	No data available in the literature	
dimethyl ether (115-10-6)		
рН	Not applicable (gas)	
Respiratory or skin sensitisation	 May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. 	
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)	
Carcinogenicity	: Suspected of causing cancer.	
Polymethylene polyphenyl isocyanate (9016-87	-9)	
IARC group	3 - Not classifiable	
Reproductive toxicity	: May cause harm to breast-fed children.	
Reaction products of phosphoryl trichloride an	d 2-methyloxirane (1244733-77-4)	
LOAEL (animal/female, Fo/P)	≈ 99 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)	



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Reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)		
NOAEL (animal/male, Fo/P)	≈ 85 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)	
STOT-single exposure	: May cause respiratory irritation.	
Polymethylene polyphenyl isocyanate (90	016-87-9)	
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.	
Polymethylene polyphenyl isocyanate (90	016-87-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Reaction products of phosphoryl trichlor	ide and 2-methyloxirane (1244733-77-4)	
LOAEL (oral, rat, 90 days)	≈ 99 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:	
NOAEL (oral, rat, 90 days)	≈ 85 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: other:	
chloroparaffines, C14-17 (85535-85-9)		
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)	
POINT Penoplast		
Vaporizer	Aerosol	
Polymethylene polyphenyl isocyanate (90	016-87-9)	
Viscosity, kinematic	No data available in the literature	
dimethyl ether (115-10-6)		
Viscosity, kinematic	Not applicable (gas)	
chloroparaffines, C14-17 (85535-85-9)		
Viscosity, kinematic	90 – 12000 mm²/s (20 °C)	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: Harmful to aquatic life with long lasting effects. May cause long lasting harmful effects to aquatic life.



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(acute)	Not classified (Based on available data, the classification criteria are not met). May cause long lasting harmful effects to aquatic life.
Polymethylene polyphenyl isocyanate (9016-87-9)	
LC50 - Other aquatic organisms [1]	> 1000 mg/l (96 h, Literature study)
dimethyl ether (115-10-6)	
LC50 - Fish [1]	> 4100 mg/l (NEN 6504: Water - Determination of toxicity with Poecilia reticulata, 96 h, Poecilia reticulata, Semi-static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 4400 mg/l (NEN 6501: Water - Determination of toxicity with Daphnia magna, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal)
EC50 96h - Algae [1]	154,9 mg/l (ECOSAR v1.00, Algae, QSAR, Estimated value)
ethanediol; ethylene glycol (107-21-1)	
LC50 - Fish [1]	> 72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'
Reaction products of phosphoryl trichloride and	2-methyloxirane (1244733-77-4)
LC50 - Fish [1]	56,2 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	131 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	82 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
chloroparaffines, C14-17 (85535-85-9)	
LC50 - Fish [1]	> 10000 mg/l Test organisms (species): Alburnus alburnus
LC50 - Fish [2]	> 5000 mg/l Test organisms (species): Alburnus alburnus
EC50 - Crustacea [1]	0,0059 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 3,2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	> 3,2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	> 3,2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	o,o18 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	o,o1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'



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chloroparaffines, C14-17 (85535-85-9)	
	4,5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '60 d'

12.2. Persistence and degradability

POINT Penoplast			
Persistence and degradability	Rapidly degradable		
Polymethylene polyphenyl isocyanate (9016-87-9)	Polymethylene polyphenyl isocyanate (9016-87-9)		
Persistence and degradability	Not readily biodegradable in water.		
dimethyl ether (115-10-6)			
Persistence and degradability	Non degradable in the soil,Not readily biodegradable in water.		
ethanediol; ethylene glycol (107-21-1)			
Persistence and degradability	Rapidly degradable		
Reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)			
Persistence and degradability	Rapidly degradable		
chloroparaffines, C14-17 (85535-85-9)			
Persistence and degradability	Not readily biodegradable in the soil, Not readily biodegradable in water.		

12.3. Bioaccumulative potential

Polymethylene polyphenyl isocyanate (9016-87-9)		
BCF - Fish [1] 268,1 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)		
Partition coefficient n-octanol/water (Log Pow)	10,46 (Calculated, KOWWIN)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
dimethyl ether (115-10-6)		
Partition coefficient n-octanol/water (Log Pow)	0,1 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
chloroparaffines, C14-17 (85535-85-9)		
BCF - Fish [1]	6660 – 9140 l/kg (OECD 305: Bioconcentration: Flow-Through Fish Test, 35 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	4,7 – 8,3 (Experimental value, Equivalent or similar to OECD 117)	
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).	



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12.4. Mobility in soil

Polymethylene polyphenyl isocyanate (9016-87-9)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	9,078 – 10,597 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Adsorbs into the soil.	
dimethyl ether (115-10-6)		
Surface tension	No data available in the literature	
Ecology - soil	Not applicable (gas).	
chloroparaffines, C14-17 (85535-85-9)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5 – 5,2 (log Koc, Experimental value)	
Ecology - soil	Low potential for mobility in soil.	

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	chloroparaffines, C14-17 (85535-85-9)
Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	chloroparaffines, C14-17 (85535-85-9)
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Polymethylene polyphenyl isocyanate (9016-87-9), dimethyl ether (115-10-6), ethanediol; ethylene glycol (107-21-1), Reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Polymethylene polyphenyl isocyanate (9016-87-9), dimethyl ether (115-10-6), ethanediol; ethylene glycol (107-21-1), Reaction products of phosphoryl trichloride and 2-methyloxirane (1244733-77-4)

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available



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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation

Waste treatment methods Sewage disposal recommendations Product/Packaging disposal recommendations Additional information Ecological information European List of Waste (LoW, EC 2000/532)

HP Code

- : Disposal must be done according to official regulations.
- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Disposal must be done according to official regulations.
- : Disposal must be done according to official regulations.
- : Do not re-use empty containers.
- : Avoid release to the environment.
- : 08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
 - 14 06 03* other solvents and solvent mixtures

15 01 11* - metallic packaging containing a dangerous solid porous matrix (e.g. asbestos), including empty pressure containers

- : HP3 "Flammable:"
 - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
 - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small
 - quantities, is liable to ignite within five minutes after coming into contact with air;
 - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
 - flammable gaseous waste: gaseous waste which is flammable in air at 20 $^\circ$ C and a standard pressure of 101.3 kPa;
 - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
 - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
 - HP5 "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
 - HP6 "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
 - HP7 "Carcinogenic:" waste which induces cancer or increases its incidence
 - HP4 "Irritant skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.
- HP13 "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.
- HP14 "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment
- : R13 Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where the waste is produced)

Denmark

Hazardous Waste Group

: Z - Waste that cannot be placed in other groups

SECTION 14: Transport information

R/D code (Recovery/Disposal, EU 2008/98)

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



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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID numb	ber		1	I
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping na	ime			
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
Transport document description	on		1	1
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
14.3. Transport hazard class	i(es)		·	
2.1	2.1	2.1	2.1	2.1
14.4. Packing group				I
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazard	S			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information	available			

14.6. Special precautions for user

Overland transport Classification code (ADR) : 5F Special provisions (ADR) : 190, 327, 344, 625 Limited quantities (ADR) : 11 Excepted quantities (ADR) : Eo Packing instructions (ADR) : P207 Special packing provisions (ADR) : PP87, RR6, L2 Mixed packing provisions (ADR) : MP9 Transport category (ADR) : 2 Special provisions for carriage - Packages (ADR) : V14 Special provisions for carriage - Loading, unloading : CV9, CV12 and handling (ADR) Special provisions for carriage - Operation (ADR) : S2 Tunnel restriction code (ADR) : D

Transport by sea

Special provisions (IMDG)

: 63, 190, 277, 327, 344, 381, 959



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Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69
Air transport	
PCA Excepted quantities (IATA)	: Eo
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L
Inland waterway transport	
Classification code (ADN)	: 5F
Special provisions (ADN)	: 190, 327, 344, 625
Limited quantities (ADN)	: 1L
Excepted quantities (ADN)	: Eo
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01, VE04
Number of blue cones/lights (ADN)	: 1
Rail transport	
Special provisions (RID)	: 190, 327, 344, 625
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: Eo
Packing instructions (RID)	: P207, LP200
Special packing provisions (RID)	: PP87, RR6, L2
Mixed packing provisions (RID)	: MP9
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W14
Special provisions for carriage - Loading, unloading and handling (RID)	: CW9, CW12
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 23

14.7. Maritime transport in bulk according to IMO instruments

Not applicable



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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations \geq 0.1 % or SCL: Medium-chain chlorinated paraffins (MCCP) (EC 287-477-0, CAS 85535-85-9)

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

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)

15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Water hazard class (WGK)	
Hazardous Incident Ordinance (12. BImSchV)	

: WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).
: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)



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Netherlands

rectionantas	
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	 chloroparaffines, C14-17 is listed chloroparaffines, C14-17 is listed chloroparaffines, C14-17 is listed None of the components are listed None of the components are 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 Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material The requirements from the Danish Working Environment Authorities regarding work with epoxy resins and isocyanates must be observed during use and disposal The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes: Modified.

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



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Abbreviations and acronyms:		
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	
OEL	Occupational Exposure Limit	
РВТ	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 disrupting properties	

Data sources

: Classification according to Regulation (EC) No. 1272/2008 [CLP]. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Regulation on Health and Safety Precautions When Working with Chemical Substances published in the Official Journal numbered 28733 on August 12, 2013. ECHA (European Chemicals Agency).

Other information

: Disclaimer: This Certificate provides restrictions for use of the specified product based only on those materials restricted by IFRA Standards for the toxicity endpoint(s) described in each Standard. This Certificate does not provide certification of a comprehensive safety assessment of all product constituents.



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Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aerosol 1	Aerosol, Category 1	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4	
Carc. 2	Carcinogenicity, Category 2	
EUH204	Contains isocyanates. May produce an allergic reaction.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Gas 1A	Flammable gases, Category 1A	
H220	Extremely flammable gas.	
H222	Extremely flammable aerosol.	
H229	Pressurised container: May burst if heated.	
Н302	Harmful if swallowed.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
Н334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H335	May cause respiratory irritation.	
H351	Suspected of causing cancer.	
H362	May cause harm to breast-fed children.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
H413	May cause long lasting harmful effects to aquatic life.	
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation	
Press. Gas	Gases under pressure	
Resp. Sens. 1	Respiratory sensitisation, Category 1	



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Full text of H- and EUH-statements:	
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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