SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

EXPERT LINE PROFESSIONAL FAST FOAM 70

Creation date	07th April 2025		
Revision date		Version	1.1

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

1.1. Product identifier — EXPERT LINE PROFESSIONAL FAST FOAM 70

Substance / mixture: mixture

UFI: E9T6-Q9N4-Q00D-2QV6

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

Mixture's intended use

In construction – professional single-component polyurethane foam in gun applicator version, with reduced hardening time is destined for assembling, insulation and sealing.

Main intended use

PC-ADH-2 — Adhesives and sealants - building and construction works (except cement based adhesives)

Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Distributor

Name or trade name	Rytm Trade Sp. z o.o.
Address	Strefowa 14, Tychy, 43-100 Poland
Phone	+48 32 324 00 60
Web address	www.rytmtrade.com

Manufacturer

Name or trade name	Rytm-L Sp. z o.o.
Address	Strefowa 14, Tychy, 43-100 Poland
Phone	+48 32 324 00 00
E-mail	rytm@rytm-l.pl

Competent person responsible for the safety data sheet

Name	Rytm-L Sp. z o.o.
E-mail	chb_karty@rytm-l.pl

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Aerosol 1, H222, H229
Skin Irrit. 2, H315
Skin Sens. 1B, H317
Eye Irrit. 2, H319
Acute Tox. 4, H332
Resp. Sens. 1, H334
STOT SE 3, H335
Carc. 2, H351
Lact., H362
STOT RE 2, H373 (respiratory tract) (inhalation)
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

Most serious adverse physico-chemical effects

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

Most serious adverse effects on human health and the environment

Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause damage to the respiratory tract through prolonged or repeated exposure if inhaled. Suspected of causing cancer. May cause harm to breast-fed children. Harmful if inhaled. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

Polymeric diphenylmethane diisocyanate, Polymeric MDI
alkanes, C14-17, chloro
Tris(2-chloro-1-methylethyl) phosphate

Hazard statements

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.
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.
H362	May cause harm to breast-fed children.
H373	May cause damage to the respiratory tract through prolonged or repeated exposure if inhaled.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
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.
P260	Do not breathe gazu/par.
P271	Use only outdoors or in a well-ventilated area.
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 and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 no expose to temperatures exceeding 50 °C.
P501	Dispose of contents/container to according to applicable regulations.

Supplemental information

EUH204	Contains isocyanates. May produce an allergic reaction.
EUH066	Repeated exposure may cause skin dryness or cracking.
	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.
	As from 24 August 2023 adequate training is required before industrial or professional use.

Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 9016-87-9	Polymeric diphenylmethane diisocyanate, Polymeric MDI	38-55	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319 Resp. Sens. 1, H334 STOT SE 3, H335 Carc. 2, H351 STOT RE 2, H373 (respiratory tract (inhalation)) Specific concentration limit: Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335: C ≥ 5 % Resp. Sens. 1, H334: C ≥ 0.1 %	
Index: 603-019-00-8 CAS: 115-10-6 EC: 204-065-8 Registration number: 01-2119472128-37-xxxx	dimethyl ether	<10	Flam. Gas 1, H220 Press. Gas (liquefied gas), H280	2, 3
Index: 602-095-00-X CAS: 85535-85-9 EC: 287-477-0 Registration number: 01-2119519269-33-xxxx	alkanes, C14-17, chloro	<10	Lact., H362 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=10) EUH066	4, 5
CAS: 1244733-77-4 EC: 807-935-0 Registration number: 01-2119486772-26-xxxx	Tris(2-chloro-1-methylethyl) phosphate	<10	Acute Tox. 4, H302 Carc. 2, H351 Aquatic Chronic 3, H412	6
Index: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7 Registration number: 01-2119474691-32-xxxx	butane	<6	Flam. Gas 1, H220 Press. Gas (liquefied gas), H280	1, 2
Index: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9 Registration number: 01-2119486944-21-xxxx	propane	<5	Flam. Gas 1, H220 Press. Gas (liquefied gas), H280	2

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 601-004-00-0 CAS: 75-28-5 EC: 200-857-2 Registration number: 01-2119485395-27-xxxx	isobutane	<5	Flam. Gas 1, H220 Press. Gas (liquefied gas), H280	1, 2
Index: 607-194-00-1 CAS: 108-32-7 EC: 203-572-1	propylene carbonate	<2	Eye Irrit. 2, H319	
CAS: 6425-39-4 EC: 229-194-7	Morpholine, 4,4'-(oxydi-2,1-ethanediyl)bis-	<2	Eye Irrit. 2, H319	

Notes

1 *Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.*

2 *Note U (Table 3): 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).

3 *A substance for which exposure limits are set.*

4 *Substance of very high concern - SVHC.*

5 *Persistent, bioaccumulative and toxic or very persistent and very bioaccumulative*

6 *Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.*

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Unlikely.

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

If inhaled

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

If on skin

May cause an allergic skin reaction.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Extremely flammable aerosol. Pressurised container: May burst if heated. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Do not inhale aerosols. Prevent contact with skin and eyes. No smoking. Protect against direct sunlight. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not pierce or burn, even after use. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Avoid contact during pregnancy and while nursing. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Protect from sunlight. Keep container tightly closed. Do not expose to temperatures exceeding 50 °C.

Content	Packaging type	Material of package
830 ml	can / tin	FE

Storage class	2B - Aerosols
Storage temperature	+5 - +30 °C

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union **Commission Directive 2000/39/EC**

Substance name (component)	Type	Value
dimethyl ether (CAS: 115−10−6)	OEL 8 hours	1920 mg/m³
	OEL 8 hours	1000 ppm

DNEL

alkanes, C14-17, chloro			
Workers / consumers	Route of exposure	Value	Effect
Consumers (0)	Oral	0.58 mg/kg bw/day	Chronic effects systemic
Consumers (0)	Dermal	28.75 mg/kg bw/day	Chronic effects systemic
Workers (0)	Dermal	47.9 mg/kg bw/day	Chronic effects systemic
Consumers (0)	Inhalation	2 mg/m³	Chronic effects systemic
Workers (0)	Inhalation	6.7 mg/m³	Chronic effects systemic

Polymeric diphenylmethane diisocyanate, Polymeric MDI			
Workers / consumers	Route of exposure	Value	Effect
Workers (0)	Inhalation	0.1 mg/m³	Acute effects local
Workers (0)	Inhalation	0.05 mg/m³	Chronic effects local
Consumers (0)	Inhalation	0.05 mg/m³	Acute effects local
Consumers (0)	Inhalation	0.025 mg/m³	Chronic effects local

Tris(2-chloro-1-methylethyl) phosphate			
Workers / consumers	Route of exposure	Value	Effect
Consumers	Inhalation	5.6 mg/m³	Acute effects systemic
Consumers	Dermal	1.04 mg/kg bw/day	Chronic effects systemic
Consumers	Inhalation	1.45 mg/m³	Chronic effects systemic
Consumers	Oral	0.52 mg/kg bw/day	Chronic effects systemic
Workers	Dermal	2.91 mg/kg bw/day	Chronic effects systemic
Consumers	Oral	2 mg/kg bw/day	Acute effects systemic
Workers	Inhalation	8.2 mg/m³	Chronic effects systemic
Workers	Inhalation	22.6 mg/m³	Acute effects systemic

PNEC

alkanes, C14-17, chloro	
Route of exposure	Value
Drinking water	0.001 mg/l
Marine water	0.0002 mg/l
Microorganisms in sewage treatment	80 mg/l
Freshwater sediment	13 mg/kg of dry substance of sediment
Sea sediments	2.6 mg/kg of dry substance of sediment
Soil (agricultural)	11.9 mg/kg of dry substance of soil
Oral	10 mg/kg of food

Polymeric diphenylmethane diisocyanate, Polymeric MDI	
Route of exposure	Value
Drinking water	3.7 µg/l
Marine water	0.37 µg/l
Freshwater sediment	11.7 mg/kg of dry substance of sediment
Sea sediments	1.17 mg/kg of dry substance of sediment
Soil (agricultural)	2.33 mg/kg of dry substance of soil
Water (intermittent release)	37 µg/l

Tris(2-chloro-1-methylethyl) phosphate	
Route of exposure	Value
Water (intermittent release)	0.51 mg/l
Marine water	0.032 mg/l
Soil (agricultural)	0.34 mg/kg of dry substance
Freshwater sediment	11.5 mg/kg of dry substance
Sea sediments	1.15 mg/kg of dry substance
Microorganisms in sewage treatment	7.84 mg/l
Oral	11.6 mg/kg of food
Drinking water	0.32 mg/l
Microorganisms in sewage treatment	19.1 mg/l

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment. In case of inadequate ventilation wear respiratory protection.

Thermal hazard

Data not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	yellow
color intensity	light
Odour	characteristic
Melting point/freezing point	not determined
Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	<0 °C (DIN 51556)
Boiling point or initial boiling point and boiling range	-42.1 °C
Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	>300 °C
Flammability	inflammable
Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	non-inflammable
Lower and upper explosion limit	
bottom	1.5 %
upper	10.9 %
Flash point	-95 °C
Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	>200 °C
Auto-ignition temperature	not applicable
Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	>600 °C (EU Method A.15)
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	insoluble
Partition coefficient n-octanol/water (log value)	data not available
Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	reacts with water
Vapour pressure	0.51 MPa at 20 °C
Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	<0.00001 mm Hg at 25 °C (Literatura)
Density and/or relative density	
Density	0.97 g/cm³ at 20 °C

Polymeric diphenylmethane diisocyanate, Polymeric MDI (CAS: 9016-87-9)	1.23 g/cm³ at 25 °C (Literatura)
Relative vapour density	data not available
Particle characteristics	data not available
Form	liquid, spray
Morpholine, 4,4'-(oxydi-2,1-ethanediyl)bis- (CAS: 6425-39-4)	liquid solid: bulk

Preparation in the form of an aerosol. The classification was made on the basis of the ingredient MSDS. Determination of the parameters of the preparation in this form was not performed due to the form of the preparation.

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

When used and stored in the standard way, the mixture is not reactive.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost. Pressurised container: May burst if heated.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Harmful if inhaled.

alkanes, C14-17, chloro						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		>4000 mg/kg		Rat	

butane						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Inhalation	LC_{50}		658 mg/l	4 hours	Rat	

Polymeric diphenylmethane diisocyanate, Polymeric MDI						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		>2000 mg/kg		Rat (Rattus norvegicus)	F/M
Inhalation	LC_{50}	OECD 403	431 mg/m³ of air	4 hours	Rat (Rattus norvegicus)	F/M

Polymeric diphenylmethane diisocyanate, Polymeric MDI						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Dermal	LD_{50}	OECD 402	>9400 mg/kg	24 hours	Rabbit	F/M

Tris(2-chloro-1-methylethyl) phosphate						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		632 mg/kg		Rat	F
Dermal	LD_{50}	OECD 402	>2000 mg/kg		Rabbit	
Dermal	LD_{50}	OECD 402	>2000 mg/kg		Rat	
Inhalation (dust/mist)	LC_{50}	OECD 403	>7 mg/l	4 hours	Rat	F/M
Oral	LD_{50}		>500-<2000 mg/kg		Rat (Rattus norvegicus)	M

Skin corrosion/irritation
Causes skin irritation.

Polymeric diphenylmethane diisocyanate, Polymeric MDI				
Route of exposure	Result	Method	Exposure time	Species
Dermal	Irritating	OECD 404		Rabbit

Serious eye damage/irritation
Causes serious eye irritation.

Polymeric diphenylmethane diisocyanate, Polymeric MDI				
Route of exposure	Result	Method	Exposure time	Species
Eye	No effect	OECD 405		Rabbit

Respiratory or skin sensitisation
May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Polymeric diphenylmethane diisocyanate, Polymeric MDI					
Route of exposure	Result	Method	Exposure time	Species	Sex
Skin	Sensitizing	OECD 429		Guinea-pig	
Inhalation	Sensitizing			Rat	

Germ cell mutagenicity
Based on available data the classification criteria are not met.

Polymeric diphenylmethane diisocyanate, Polymeric MDI					
Result	Method	Exposure time	Specific target organ	Species	Sex
Negative	EU B.13/14			Bacteria (Salmonella typhimurium)	
Negative	OECD 474	3 weeks (1 hour/day, 1 days/week)		Rat	M

Carcinogenicity
Suspected of causing cancer.

Tris(2-chloro-1-methylethyl) phosphate						
Route of exposure	Parameter	Value	Exposure time	Result	Species	Sex
Oral			2 years	Positive	Rat	F/M
Oral			2 years	Positive	Mouse	F/M

Reproductive toxicity
May cause harm to breast-fed children.

Polymeric diphenylmethane diisocyanate, Polymeric MDI							
Effect	Parameter	Method	Value	Exposure time	Result	Species	Sex
	NOAEC	OECD 414	4 mg/m³ of air	10 days (6 hour/day)	Maternal toxicity	Rat	F

Toxicity for specific target organ - single exposure
May cause respiratory irritation.

Polymeric diphenylmethane diisocyanate, Polymeric MDI					
Route of exposure	Parameter	Value	Result	Species	Sex
Inhalation			Irritating		

Toxicity for specific target organ - repeated exposure
May cause damage to the respiratory tract through prolonged or repeated exposure if inhaled.

Polymeric diphenylmethane diisocyanate, Polymeric MDI								
Route of exposure	Parameter	Method	Value	Exposure time	Specific target organ	Result	Species	Sex
Inhalation (aerosols)		OECD 453	0.23 mg/m³ of air	2 years (17 hour/day, 5 days/week)	Lungs		Rat	F

Repeated dose toxicity

Tris(2-chloro-1-methylethyl) phosphate						
Route of exposure	Parameter	Result	Value	Exposure time	Species	Sex
Oral	LOAEL		52 mg/kg		Rat	

Aspiration hazard
Based on available data the classification criteria are not met.

Polymeric diphenylmethane diisocyanate, Polymeric MDI					
Route of exposure	Result	Exposure time	Species	Sex	Value determination
					Insufficient data

11.2. Information on other hazards

Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information

not available

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

Acute toxicity

alkanes, C14-17, chloro					
Parameter	Method	Value	Exposure time	Species	Environment
EC_{50}	OECD 202	0.006 mg/l	48 hours	Daphnia (Daphnia magna)	
LC_{50}	OECD 203	>5000 mg/l	96 hours	Fish	
EC_{50}	OECD 201	>3.2 mg/l	72 hours	Algae	

Polymeric diphenylmethane diisocyanate, Polymeric MDI					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	>1000 mg/l	96 hours	Fish (Danio rerio)	Fresh water
EC_{50}	OECD 202	3.7 mg/l	48 hours	Daphnia (Daphnia magna)	Fresh water
EC_{50}	OECD 201	>100 mg/l	72 hours	Algae (Desmodesmus subspicatus)	Fresh water
EC_{50}	OECD 209	>100 mg/l	3 hours	Microorganisms	Activated sludge
LC_{50}	OECD 207	>1000 mg/kg of dry substance of soil	14 days	Invertebrates (Eisenia fetida)	
EC_{50}	OECD 208	>1000 mg/kg of dry substance of soil	14 days	Higher plants (Avena sativa)	
EC_{50}	OECD 208	>1000 mg/kg of dry substance of soil	14 days	Higher plants (Lactuca sativa)	

Tris(2-chloro-1-methylethyl) phosphate					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		56.2 mg/l	96 hours	Fish (Danio rerio)	Fresh water
EC_{50}		131 mg/l	48 hours	Daphnia (Daphnia magna)	Fresh water
EC_{50}	OECD 201	82 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	Fresh water
LC_{50}		51 mg/l	96 hours	Fish (Pimephales promelas)	Fresh water
EC_{50}		784 mg/l	3 hours	Microorganisms	Activated sludge
EC_{10}		191 mg/l	3 hours	Microorganisms	Activated sludge

Chronic toxicity

alkanes, C14-17, chloro					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 212	3.4 mg/l		Fish	
NOEC	OECD 202	0.01 mg/l	21 days	Daphnia (Daphnia magna)	

Polymeric diphenylmethane diisocyanate, Polymeric MDI					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 211	≥10 mg/l	21 days	Daphnia (Daphnia magna)	Fresh water

Tris(2-chloro-1-methylethyl) phosphate					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	OECD 201	13 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	Fresh water
NOEC	OECD 202	32 mg/l	21 days	Daphnia (Daphnia magna)	Fresh water

12.2. Persistence and degradability

not available

Half-life time

Polymeric diphenylmethane diisocyanate, Polymeric MDI			
Route of exposure	Value	Value determination	Source
Air	8 hours		
Drinking water	5 minutes		
Soil (agricultural)	24 hours		

Biodegradability

alkanes, C14-17, chloro					
Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301D	13-66 %	28 days		

Polymeric diphenylmethane diisocyanate, Polymeric MDI					
Parameter	Method	Value	Exposure time	Environment	Result
	OECD 302C	0 %	28 hours		Not biodegradable, Persistent

12.3. Bioaccumulative potential

Data not available.

Polymeric diphenylmethane diisocyanate, Polymeric MDI						
Parameter	Method	Value	Exposure time	Species	Environment	Temperature [°C]
BCF	OECD 305	200	28 days	Fish (Cyprinus carpio)	Fresh water	

12.4. Mobility in soil

Data not available.

Polymeric diphenylmethane diisocyanate, Polymeric MDI		
Parameter	Value	Temperature
Log Koc	4.5	20°C

12.5. Results of PBT and vPvB assessment

PBT:
alkanes, C14-C17, chloro [CAS: 85535-85-9]
vPvB:
alkanes, C14-C17, chloro [CAS: 85535-85-9]

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Data not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

16 05 04* gases in pressure containers (including halons) containing hazardous substances
08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances

Packaging waste type code

15 01 01 paper and cardboard packaging
15 01 10* packaging containing residues of or contaminated by hazardous substances
(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

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SECTION 14: Transport information

14.1. UN number or ID number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

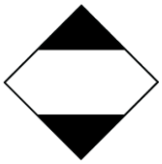
Additional information

Disable LQ.

Hazard identification No.	
UN number	1950
Classification code	5F
Safety signs	2.1+hazardous for the environment

Road transport - ADR

Limited quantities	1 L
Sign	



Tunnel restriction code	(D)

Air transport - ICAO/IATA

Packaging instructions passenger	203
Cargo packaging instructions	203

Marine transport - IMDG

EmS (emergency plan)	F-D, S-U
MFAG	620

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
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.
H362	May cause harm to breast-fed children.
H373	May cause damage to the respiratory tract (inhalation) through prolonged or repeated exposure.
H373	May cause damage to the respiratory tract through prolonged or repeated exposure if inhaled.
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.

Guidelines for safe handling used in the safety data sheet

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
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.
P260	Do not breathe gazu/par.
P271	Use only outdoors or in a well-ventilated area.
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 and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 no expose to temperatures exceeding 50 °C.
P501	Dispose of contents/container to according to applicable regulations.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

Acute Tox.	Acute toxicity
ADR	European agreement concerning the international carriage of dangerous goods by road
Aerosol	Aerosol
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
BCF	Bioconcentration Factor
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC_{10}	Concentration of a substance when it is affected 10 % of the population
EC_{50}	Concentration of a substance when it is affected 50 % of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
Eye Irrit.	Eye irritation
Flam. Gas	Flammable gas
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods

IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
Lact.	Lactation
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
NOAEC	No observed adverse effect concentration
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, bioaccumulative and toxic
PMT	Persistent, mobile and toxic
ppm	Parts per million
Press. Gas	Gases under pressure
Press. Gas (Comp.)	Gas under pressure: compressed gas
Press. Gas (Diss.)	Gas under pressure: dissolved gas
Press. Gas (Liq.)	Gas under pressure: liquefied gas
Press. Gas (Ref. Liq.)	Gas under pressure: refrigerated liquefied gas
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Resp. Sens.	Respiratory sensitization
RID	Agreement on the transport of dangerous goods by rail
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very persistent and very bioaccumulative
vPvM	Very persistent and very mobile

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

Version 1.1 replaces the BL version from 2024-02-26. The changes have been made in sections 3, 9, 15.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.