

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

1.1 Product identifier

Trade name: **Hermeticfoam (B2)**

UFI: RPT2-Q07C-8008-1278

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

Application of the substance / mixture Polyurethane-sealant

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

ROTHO BLAAS SRL

Via dell'Adige 2/1 - I - 39040 Cortaccia (BZ)

Tel.: +39 0471818400

e-mail: reach@rothoblaas.com

1.4 Emergency telephone number

Call local emergency information.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Aerosol 1 H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

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

Carc. 2 H351 Suspected of causing cancer.

STOT SE 3 H335 May cause respiratory irritation.

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

Additional information:

Pressurized container: Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Formation of explosive mixtures possible without sufficient ventilation.

Persons with high respiratory sensitivity (e.g. asthma, chronic bronchitis) must not come into contact with the product.

Respiratory symptoms in case of overexposure may still occur after several hours. Dust, vapours and aerosols are particularly harmful to the respiratory tract.

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

Trade name: Hermeticfoam (B2)

Hazard-determining components of labelling:

4,4'-methylenediphenyl diisocyanate

Hazard statements

H222 Extremely flammable aerosol.

H229 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

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.

P261 Avoid breathing vapours/spray.

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

P280 Wear protective gloves, eye 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.

P314 Get medical advice/attention if you feel unwell.

P405 Store locked up.

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

P501 Dispose of contents/container to hazardous or special waste collection point.

Additional safetyphrases according to Annex XVII of the Commission Regulation No.1907/2006:

As from 24 August 2023 adequate training is required before industrial or professional use.

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not meet the PBT- or vPvB-criteria according to Regulation (EC) No 1907/2006.

Determination of endocrine-disrupting properties

This product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2 Mixture

Description: Prepolymer (mixed polyol and polymeric isocyanate) with freon-free low-boiling propellant

Dangerous components:

CAS: 101-68-8 EINECS: 202-966-0 Index number: 615-005-00-9 Reg.No.: 01-2119457014-47	4,4'-methylenediphenyl diisocyanate 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, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	30 - 60%
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Trade name: Hermeticfoam (B2)

CAS: 1244733-77-4 EC number: 807-935-0 Reg.No.: 01-2119486772-26	reaction products of phosphoryl trichloride and 2-methyloxirane Acute Tox. 4, H302	20 - <23%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.No.: 01-2119485395-27	isobutane (< 0.1% butadiene) Flam. Gas 1A, H220; Press. Gas (Comp.), H280	5 - 10%
CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8 Reg.No.: 01-2119472128-37	dimethyl ether Flam. Gas 1A, H220; Press. Gas (Comp.), H280	5 - 10%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.No.: 1-2119486944-21	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	1 - 5%
CAS: 111-46-6 EINECS: 203-872-2 Index number: 603-140-00-6 Reg.No.: 01-2119457857-21	diethylene glycol Acute Tox. 4, H302	1 - <2%

Additional information:

Reaction products of phosphoryl trichloride and 2-methyloxirane (TCPP): UVCB-substance (Unknown or Variable composition, Complex reaction products or Biological materials)
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of accident or if you feel unwell seek medical advice (show label where possible).

In case of unconsciousness place patient stably in side position for transportation.

After inhalation: Supply fresh air, keep warm and at rest. If symptoms persist seek medical advice.

After skin contact:

Remove contaminated clothes, wash the affected skin with water and soap.

If skin irritation persists consult a doctor.

After eye contact:

Remove contact lenses, if present and easy to do. Rinse opened eyes for at least 15 minutes with plenty of water. If irritation persists seek medical advice.

After swallowing:

Not anticipated as this is an aerosol spray.

Keep affected person warm and at rest.

Seek immediate medical advice in case of complaints.

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation irritation of mucous membranes of the airways can occur in sensitive people.

Local skin irritation (redness, itchiness). Degreases and dries skin.

Local eye conjunctiva irritation (redness, burning eyes, eye watering)

May cause irritation to the gastrointestinal tract accompanied by abdominal pain and nausea, even vomiting and diarrhoea can occur.

Trade name: Hermeticfoam (B2)

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, extinguishing powder, sand, soil

For safety reasons unsuitable extinguishing agents: Water

5.2 Special hazards arising from the substance or mixture

Product contains highly flammable vapours and liquids. Formation of smoke in case of fire; carbon oxides, soot, hydrocarbons and aldehydes can be released due to incomplete combustion and thermolysis.

Risk of bursting due to heat. Formation of explosive air/vapour mixtures are possible. Vapors are heavier than air. By distribution at ground level flash back to distant ignition sources is possible.

5.3 Advice for firefighters

Protective equipment:

In case of fire wear self-contained respiratory equipment and full protective suit.

Do not inhale explosion gases or combustion gases.

Additional information

Cool endangered receptacles with water spray. Contain runoff to prevent entry into water or drainage systems.

Dispose of fire debris and contaminated firefighting water according to the regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Please notice instructions for person-related safety precautions, wear protective equipment (see 8.)

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

Keep unprotected persons away. Ensure adequate ventilation.

Keep away from ignition sources.

6.2 Environmental precautions:

Do not allow to enter sewers, surface or ground water.

Advise water authority in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Cover with sand or damp soil.

Allow to solidify and remove mechanically.

Dispose contaminated material as waste according to item 13.

Remove residues using PU foam cleaner.

Additional information: Material automatically cures when exposed to air.

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.

Trade name: Hermeticfoam (B2)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

While handling pay attention to the usual precaution for chemicals.
Comply with instructions for use.
Avoid any contact with skin, eyes and clothes.
Do not breathe gas/vapours/spray.
Provide good ventilation/exhaustion at the workplace.
Wash hands before break and at the end of work.

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.
Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.
Do not spray on an open flame or glowing objects.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in cool, dry place in tightly closed original containers.
Storage regulations for pressurized gas receptacles must be observed.
Suitable material for receptacles: FE (40) or ALU (41)

Information about storage in one common storage facility:

Do not store food, beverages and animal feeding stuff in the storage area.

Further information about storage conditions:

Keep out of the reach of children and domestic animals.
Protect from heat and direct sunlight.

7.3 Specific end use(s) Sealant

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 101-68-8 4,4'-methylenediphenyl diisocyanate

MAK (Austria)	Short-term value: 0.1 mg/m ³ , 0.01 ppm; Long-term value: 0.05 mg/m ³ , 0.005 ppm see Annex III B
AGW (Germany)	Long-term value: 0.05 E mg/m ³ ; 1;=2=(I);DFG, 11, 12, H, Sah, Y

CAS: 75-28-5 isobutane (< 0.1% butadiene)

MAK (Austria)	Short-term value: 3800 mg/m ³ , 1600 ppm; Long-term value: 1900 mg/m ³ , 800 ppm
AGW (Germany)	Long-term value: 2400 mg/m ³ , 1000 ppm; 4(II);DFG

CAS: 115-10-6 dimethyl ether

IOELV (EU)	Long-term value: 1920 mg/m ³ , 1000 ppm
MAK (Austria)	Short-term value: 3820 mg/m ³ , 2000 ppm; Long-term value: 1910 mg/m ³ , 1000 ppm
AGW (Germany)	Long-term value: 1900 mg/m ³ , 1000 ppm; 8(II);DFG, EU

Trade name: Hermeticfoam (B2)

CAS: 74-98-6 propane

MAK (Austria)	Short-term value: 3600 mg/m ³ , 2000 ppm; Long-term value: 1800 mg/m ³ , 1000 ppm
AGW (Germany)	Long-term value: 1800 mg/m ³ , 1000 ppm; 4(II);DFG

CAS: 111-46-6 diethylene glycol

MAK (Austria)	Short-term value: 176 mg/m ³ , 40 ppm; Long-term value: 44 mg/m ³ , 10 ppm
AGW (Germany)	Long-term value: 44 mg/m ³ , 10 ppm; 4(II);DFG, Y, 11

Regulatory information

IOELV (EU): (EU) 2019/1831

MAK (Austria): GKV 2020, 156. Verordnung, 09.04.2021, Teil II

AGW (Germany): TRGS 900

DNELs:

methylenediphenyl diisocyanate (CAS 101-68-8):

worker, short-term exposure - local and systemic effects, inhalation 0.1 mg/m³

worker, long-term exposure - local and systemic effects, inhalation 0.05 mg/m³

worker, short-term exposure - local effects, dermal 28.7 mg/cm²

worker, short-term exposure - systemic effects, dermal 50 mg/kg bw/day

consumer, short-term exposure - systemic effects, oral 20 mg/kg bw/day

consumer, short-term exposure - local and systemic effects, inhalation 0.05 mg/m³

consumer, long-term exposure - local and systemic effects, inhalation 0.025 mg/m³

consumer, short-term exposure - local effects, dermal 17.2 mg/cm²

consumer, short-term exposure - systemic effects, dermal 25 mg/kg bw/day

reaction products of phosphoryl trichloride and 2-methyloxirane (CAS 1244733-77-4):

worker, short-term exposure - systemic effects, inhalation 22.6 mg/m³

worker, long-term exposure - systemic effects, dermal 8.2 mg/cm²

consumer, short-term exposure - systemic effects, oral 2 mg/kg bw/day

consumer, long-term exposure - systemic effects, oral 0.52 mg/kg bw/day

consumer, long-term exposure - systemic effects, inhalation 1.45 mg/m³

consumer, long-term exposure - systemic effects, dermal 1.04 mg/kg bw/day

PNECs:

methylenediphenyl diisocyanate (CAS 101-68-8):

freshwater 1 mg/l, marine water 0.1 mg/l;

intermittent releases 10 mg/l; STP 1 mg/l; soil 1 mg/kg

sediment (freshwater, marine water): exposure of sediment is not expected.

reaction products of phosphoryl trichloride and 2-methyloxirane (CAS 1244733-77-4):

freshwater 0.32 mg/l, marine water 0.032 mg/l

sediment freshwater 11.5 mg/kg, marine water 11.15 mg/kg

soil 0.34 mg/kg, STP 19.1 mg/l, secondary poisoning 11.6 mg/kg

8.2 Exposure controls

Appropriate engineering controls Provide good ventilation or exhaust at work.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Avoid unnecessary contact with the product. Do not eat, drink or smoke at workplace and keep it tidy.

Avoid inhalation and contact with skin and eyes.

Remove contaminated clothing immediately and wash carefully before reuse.

After use, ensure thorough cleansing of the skin.

Pregnant women should strictly avoid inhalation or skin contact.

Trade name: Hermeticfoam (B2)

Respiratory protection:

Use protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) in case of insufficient ventilation.

Hand protection



Chemical resistant gloves (EN 374)

Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material of gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Butyl rubber (thickness ≥ 0.5 mm), fluorinated elastomer (thickness ≥ 0.4 mm), chlorinated polyethylene, ethylene vinyl alcohol (EVOH), neoprene (thickness ≥ 0.5 mm), nitrile/butadiene rubber (NBR, thickness ≥ 0.35 mm), polyvinyl chloride (PVC)

Rate of permeability: ≥ 480 minutes

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/face protection



Safety glasses (EN 166)

Body protection

Protective work clothing

Protective clothing should be professionally laundered regularly.

Environmental exposure controls

Do not allow to enter sewers or surface water. Advise water authority if spillage has entered water course or drainage system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Liquid in aerosol containers
Colour:	Not specified
Odour:	No information.
Melting point/freezing point:	< 0 °C (MDI, ISO 3016)
Boiling point or initial boiling point and boiling range:	Not applicable, as aerosol.
Flammability:	Extremely flammable.
Lower and upper explosion limit:	
Lower:	1.5 Vol % (propellant)
Upper:	16 Vol% (propellant)
Flash point:	> 200 °C (MDI, DIN 53171)
Ignition temperature:	> 350 °C (propellant) > 500 °C (MDI, DIN 51794)
Decomposition temperature:	To avoid thermal decomposition do not overheat.
pH:	No data available

Trade name: Hermeticfoam (B2)

Viscosity dynamic:	≥ 200 mPas (MDI, DIN 53019, 20 °C)
Solubility water:	Insoluble; reacts with water
organic solvents:	Soluble before curing
Partition coefficient, n-octanol/water:	Not determined
Vapour pressure:	< 0.00001 hPa (MDI) < 0.7 mPa (propellant, 20 °C)
Density at 20 °C:	1 g/cm ³
Relative gas density	No data available.

9.2 Other information

Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
VOC (EC):	0.2 kg/kg
Oxidising properties:	No data available.

Information with regard to physical hazard classes

Explosives	void
Flammable gases	void
Aerosols	Extremely flammable aerosol. Pressurised container: May burst if heated.
Oxidising gases	void
Gases under pressure	void
Flammable liquids	void
Flammable solids	void
Self-reactive substances and mixtures	void
Pyrophoric liquids	void
Pyrophoric solids	void
Self-heating substances and mixtures	void
Substances and mixtures, which emit flammable gases in contact with water	void
Oxidising liquids	void
Oxidising solids	void
Organic peroxides	void
Corrosive to metals	void
Desensitised explosives	void

SECTION 10: Stability and reactivity

10.1 Reactivity Stable in standard stocking and use conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Carbon dioxide is produced by the reaction with substances containing active oxygen, incl. water. This leads to an increase in pressure and temperature in closed containers.

10.4 Conditions to avoid

Heat, open flames, ignition sources, electrostatic charge
Heating causes rise in pressure with risk of bursting.

10.5 Incompatible materials Avoid contact with strong oxidising agents and strong acids. Reacts with water.

Trade name: Hermeticfoam (B2)

10.6 Hazardous decomposition products

None under normal conditions of storage and use.

In the case of fire can be formed: carbon oxides, nitrogen oxides hydrogen cyanide, toxic pyrolysis products

SECTION 11: Toxicological information

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

Acute toxicity Harmful if inhaled.

LD/LC50 values relevant for classification:

There are no product specific data on toxicology available.

CAS: 1244733-77-4 reaction products of phosphoryl trichloride and 2-methyloxirane

oral	LOAEL/13w	52 mg/kg (rat)
	LD50	632 mg/kg (rat, female)
dermal	LD50	> 2,000 mg/kg (rat)
inhalative	LC50/4h	> 4.6 mg/l (rat)

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

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

May cause an allergic skin reaction.

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

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

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

Additional toxicological information:

pMDI:

In case of exposure to high levels, danger of irritating effects on eyes, nose, throat and respiratory tract irrespective of the concentration arises. Symptoms (breathing difficulties, cough, asthma) may even occur after several hours; Persons already sensitised to diisocyanates may develop allergic reactions even at very low concentrations of the substance. Long-term exposure may cause skin dryness or skin degreasing.

11.2 Information on other hazards

Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.

Trade name: Hermeticfoam (B2)

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

For the product there are no ecotoxicological data available.

CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

LC50/96h	> 1,000 mg/l (zebrafish, Danio rerio) (OECD 203)
EC50/24h	> 1,000 mg/l (water flea, Daphnia magna) (OECD 202)
EC50/3h	> 100 mg/l (activated sludge) (OECD 209)
ErC50/72h	> 1,640 mg/l (alga, Desmodesmus subspicatus) (OECD 201)
NOEC/21d	> 10 mg/l (water flea, Daphnia magna) (OECD 202)

CAS: 1244733-77-4 reaction products of phosphoryl trichloride and 2-methyloxirane

LC50/96h	51 mg/l (flathead minnow, Pimephales promelas)
EC10/3h	191 mg/l (activated sludge)
EC50/48h	131 mg/l (water flea, Daphnia magna)
EC50/3h	784 mg/l (activated sludge)
ErC50/72h	82 mg/l (alga, Pseudokirchneriella subcapitata) (OECD 201)
NOEC/72h	13 mg/l (alga, Pseudokirchneriella subcapitata) (OECD 201)
NOEC/21d	32 mg/l (water flea, Daphnia magna) (OECD 202)

Additional information: Insoluble in water, the PU foam spreads on the water surface.

12.2 Persistence and degradability

pMDI: not readily biodegradable.

test: aerobic, inoculum: activated sludge

degradability: 0 %, 28 days (OECD 302 C)

reaction products of phosphoryl trichloride and 2-methyloxirane (TCPP):

Method OECD 302A 95 % - Inherent - 64 days; Method OECD 301E 14 % - Not readily - 28 days

TCPP can be considered as inherently biodegradable under aerobic conditions. Nevertheless, for risk assessment purposes the substance is evaluated as "inherently biodegradable not fulfilling the criteria".

12.3 Bioaccumulative potential

pMDI: No significant accumulation in organisms, the substance hydrolyses violently in water.

bioconcentration factor (BCF): <14 (OECD 305)

(Cyprinus carpio, exposure time 42 d, concentration 0.2 mg/l)

reaction products of phosphoryl trichloride and 2-methyloxirane (TCPP): low potential for bioaccumulation

octanol-water partition coefficient (log Pow): 2.68; bioconcentration factor (BCF): 0.8 - 14 days

12.4 Mobility in soil

Very limited due to chemical reaction with water to form an insoluble product (PU foam).

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects

Isocyanate reacts with water at the interface forming CO₂ and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by water-soluble solvents. Previous experience shows that polyurea is inert and non-degradable.

Trade name: Hermeticfoam (B2)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Do not dispose waste or remains together with domestic waste, do not empty into sink or toilet, hand over to hazardous waste disposers.

European waste catalogue

15 01 10: Packaging containing residues of or contaminated by dangerous substances

15 01 04: metallic packaging

17 02 03: plastic

Uncleaned packaging

Recommendation:

Cans should be emptied completely and should preferably be recycled or reused in compliance with the local / national regulations. Cans not emptied completely or remains have to be disposed as hazardous waste.

SECTION 14: Transport information

14.1 UN number or ID 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.

Label

2.1

IMDG, IATA



Class

2.1 Gases.

Label

2.1

14.4 Packing group

ADR, IMDG, IATA

void

14.5 Environmental hazards:

not applicable

14.6 Special precautions for user

Warning: Gases.

Hazard identification number (Kemler code):

-

14.7 Maritime transport in bulk according to IMO instruments

not applicable

Trade name: Hermeticfoam (B2)

UN "Model Regulation":

UN 1950 AEROSOLS, 2.1

SECTION 15: Regulatory information

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

Seveso category P3a FLAMMABLE AEROSOLS

Restrictions according to Annex XVII of the Regulation (EC) No 1907/2006:

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.

Methylenediphenyl diisocyanate (MDI), including some specific monomers, was included in Annex XVII (entry 56) of REACH by Regulation (EC) No 552/2009.

Diisocyanates, $O = C = NR - N = C = O$, were included in Annex XVII (entry 74) of REACH by Regulation (EU) 2020/1149.

Water hazard class: Water hazard class (German Regulation) 1 (self-assessment): slightly hazardous for water.

VOC (EC): 0.2 kg/kg

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.

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.
- EUH204 Contains isocyanates. May produce an allergic reaction.

Further information:

The classification of the mixture is in accordance with point 1.1.3.7, Annex I, Part 1 of the CLP Regulation.

Abbreviations and acronyms:

CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CAS: Chemical Abstracts Service (division of the American Chemical Society)
EINECS: European Inventory of Existing Commercial Chemical Substances
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
WEL: workplace exposure limit
IOELV: indicative occupational exposure limit values (EU)
MAK: maximum concentration of a chemical substance in the workplace

Trade name: Hermeticfoam (B2)

AGW: occupational exposure limit
 TWA: time-weighted-average
 DNEL: Derived No-Effect Level
 PNEC: Predicted No-Effect Concentration
 LC50: lethal concentration, 50%
 LD50: lethal dose, 50%
 EC50: maximal effective concentration, 50%
 ErC50: median effective concentration for growth rate (algae)
 LOAEL: Lowest observed adverse effect level
 NOEC: no observed effect concentration
 OECD: Organisation for Economic Co-operation and Development
 log Pow, Kow: partition coefficient (n-octanol/water)
 PBT: persistent, bioaccumulative and toxic properties
 vPvB: very persistent and very bioaccumulative properties
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 VOC: Volatile Organic Compounds
 Flam. Gas 1A: Flammable gases – Category 1A
 Aerosol 1: Aerosols – Category 1
 : Aerosols – Category 3
 Press. Gas (Comp.): Gases under pressure – Compressed gas
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Resp. Sens. 1: Respiratory sensitisation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 Carc. 2: Carcinogenicity – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Data compared to the previous version altered: -