Revision: 05.06.2025

Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 05.06.2025

Version 6 (replaces version 5)

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

- · 1.1 Product identifier
- · Trade name: OTTOPUR Turbo Komp. A
- · **UFI:** RGQ5-C0FM-9001-4QRV
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Product category PC1 Adhesives, sealants
- · Application of the substance / the mixture Assembly foam
- · Uses advised against Observe the information in the technical data sheet
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Hermann Otto GmbH Krankenhausstraße 14 D-83413 Fridolfing

Tel.: 0049/(0)8684/908-0 Fax.: 0049/(0)8684/908-1840

· Further information obtainable from:

Tel.: 0049- (0)8684- 908- 2363 (-4300)

E-Mail: msds@otto-chemie.de

1.4 Emergency telephone number:
+44 1865 407333 (Carechem 24)

Tel.: 0049- (0) 89- 192 40 (emergency telephone no.)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation. Carc. 2 H351 Suspected of causing cancer.

Aguatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · 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





GHS07 GHS08

· Signal word Warning

· Hazard-determining components of labelling:

Reaction products of phosphoryl trichloride and 2-methyloxirane

2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether

2,2'-oxybisethanol

· Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.

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Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

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Trade name: OTTOPUR Turbo Komp. A

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

P280 Wear protective gloves / eye protection.

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

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

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

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

· 2.3 Other hazards

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- Determination of endocrine-disrupting properties

This product does not contain components that are endocrine disruptors according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

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

Dangerous components:

CAS: 1244733-77-4 EC number: 807-935-0	Reaction products of phosphoryl trichloride and 2- methyloxirane	<50%
	& Carc. 2, H351; () Acute Tox. 4, H302; Aquatic Chronic 3, H412	
CAS: 1179964-22-7 EC number: 926-564-6	2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether • Acute Tox. 4, H302	<50%
CAS: 111-46-6 EINECS: 203-872-2 Index number: 603-140-0	2,2'-oxybisethanol • Acute Tox. 4, H302	<5%
CAS: 25214-63-5	ethylenediamine, propoxylated (1) Eye Irrit. 2, H319	<5%
CAS: 2212-32-0 EINECS: 218-658-4	2-[[2-(dimethylamino)ethyl]methylamino]ethanol ♦ Skin Corr. 1C, H314; Eye Dam. 1, H318	<2.5%

SECTION 4: First aid measures

· 4.1 Description of first aid measures

General information

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Additional information For the wording of the listed hazard phrases refer to section 16.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing

Do not induce vomiting; call for medical help immediately. Show container or label.

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Trade name: OTTOPUR Turbo Komp. A

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

After inhalation: Dry throat/throat pain. Cough. Irritation of the respiratory tract. Irritation of nasal mucous membranes. Runny nose. FOLLOWING SYMPTOMS MAY APPEAR LATER: Inflammation of the respiratory tract possible. Pulmonary oedema possible. Respiratory problems. After skin contact: Tingling/irritation of the skin. After eye contact: Irritation of eye tissue. Lacrimation.

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

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents Water with full jet.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- · Protective equipment:

Mount respiratory protective device.

Do not inhale explosion gases or combustion gases.

· Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13.

Allow to solidify. Pick up mechanically.

• 6.4 Reference to other sections See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

see item 8: Personal protective equipment

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Fumes can combine with air to form an explosive mixture.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

Prevent any seepage into the ground.

- Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

7.3 Specific end use(s) No further relevant information available.

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Trade name: OTTOPUR Turbo Komp. A

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SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:
- DNELs

1244733-77-4 Reaction products of phosphoryl trichloride and 2-methyloxirane

Dermal Worker, systemic (long term) 2.91 mg/kg/Tag (rat) Inhalative Worker, systemic (long term) 8.2 mg/m3 (rat)

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:

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.

- · Hand protection Protective gloves.
- · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Recommended glove material: Butyl rubber, BR Recommended thickness of the material: >0,4 mm

- · Penetration time of glove material Breakthrough time: 10 30 min
- · Eye/face protection Safety glasses
- · Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Physical state Liquid

· Colour: According to product specification

· Odour: Characteristic · Melting point/freezing point: undetermined

· Boiling point or initial boiling point and

boiling range Not applicable.

Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined.

· Flash point: 101 °C · Auto-ignition temperature: 385 °C

Decomposition temperature:
 pH
 Viscosity:
 Not determined.
 Not determined.

Solubility

· Water: Hydrolized

· Partition coefficient n-octanol/water (log

value) Not determined.
Vapour pressure: Not determined.

Density and/or relative density

Density: see technical data sheet

Relative densityVapour densityNot determined.Not applicable.

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Trade name: OTTOPUR Turbo Komp. A

Relative gas density undetermined

· Particle characteristics undetermined

· 9.2 Other information

· Form: pasty · Ignition temperature: 385 °C

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Information with regard to physical hazard

classes
· Aerosols
· Flammable liquids

Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Avoid strong heating.

- 10.3 Possibility of hazardous reactions No dangerous reactions known
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if swallowed.
- · LD/LC50 values relevant for classification:

1244733-77-4 Reaction products of phosphoryl trichloride and 2-methyloxirane

Oral LD50 632 mg/kg (rat) Inhalative LC50/4 h >7 mg/l (rat)

1179964-22-7 2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether

Oral LD50 732 mg/kg (rat)
Dermal LD50 >2,000 mg/kg (rat)

111-46-6 2,2'-oxybisethanol

Oral LD50 12,565 mg/kg (rat)
Dermal LD50 11,890 mg/kg (rabbit)
25214-63-5 ethylenediamine, propoxylated

Oral LD50 2,001 mg/kg (rat)

Dermal LD50 2,001 mg/kg (rat)

2,001 mg/kg (rab)

2212-32-0 2-[[2-(dimethylamino)ethyl]methylamino]ethanol

Oral LD50 >2,000 mg/kg (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Causes skin irritation.
- · Serious eye damage/irritation Causes serious eye irritation.
- · Respiratory or skin sensitisation

Sensitive people may react strongly to minimal concentrations. We advise asthmatics and people who tend to diseases of the respiratory tracts against the contact with this product.

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

- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Suspected of causing cancer.

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- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity No further relevant information available
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation

Observe local by-laws.

Already cured material can be disposed of with the domestic or commercial waste. Unconsumed material (fluid, paste-like) is to dispose of as hazardous waste.

- · Uncleaned packaging:
- Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name

· ADR, ADN, IMDG, IATA Void

· 14.3 Transport hazard class(es)

· ADR, ADN, IMDG, IATA

· Class Void

· 14.4 Packing group

· ADR, IMDG, IATA Void

• 14.5 Environmental hazards: Not applicable. • 14.6 Special precautions for user Not applicable.

· 14.7 Maritime transport in bulk according to

IMO instruments Not applicable.

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• Transport/Additional information: Not dangerous according to the above

specifications.

· UN "Model Regulation": Void

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII

No. 56 for general public

No. 74 for commercial/industrial users

Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- · National regulations
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

- · Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Details of international registration status:

Listed on or in accordance with the following inventories:

REACH - Europe listed DSL - Canada not listed NZIoC - New Zealand not listed TCSI - Taiwan not listed TSCA - USA not listed AICS - Australia not listed ECL - Korea not listed not listed IECSC - China ENCS - Japan not listed PICCS - Philippines not listed

· 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. This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

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Trade name: OTTOPUR Turbo Komp. A

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· Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.

· Date of previous version: 05.06.2025

Version number of previous version: 5

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning

the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Carc. 2: Carcinogenicity – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

* Data compared to the previous version altered.

EU-qb

Revision: 04.03.2024

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 04.03.2024

Version 4 (replaces version 3)

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

- · 1.1 Product identifier
- · Trade name: OTTOPUR Turbo Komp. B
- · **UFI:** XMD1-90DQ-S00H-VH99
- · Product category PC1 Adhesives, sealants
- · Application of the substance / the mixture Assembly foam
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Hermann Otto GmbH Krankenhausstraße 14 D-83413 Fridolfing Tel.: 0049/(0)8684/908-0 Fax.: 0049/(0)8684/908-1840

· Further information obtainable from:

Tel.: 0049- (0)8684- 908- 2363 (-4300) E-Mail: alois.parzinger@otto-chemie.de • 1.4 Emergency telephone number:

Tel.: 0049- (0) 89- 192 40 (emergency telephone no.)

+44 1865 407333 (Carechem 24)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

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.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms





GHS07 GHS08

- · Signal word Danger
- · Hazard-determining components of labelling:

diphenylmethanediisocyanate,isomeres and homologues diphenylmethane-4,4'-di-isocyanante

· Hazard statements

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.

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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 04.03.2024 Version 4 (replaces version 3) Revision: 04.03.2024

Trade name: OTTOPUR Turbo Komp. B

· Precautionary statements

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

P280 Wear protective gloves / eye protection / face protection.

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

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

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

· Additional information:

Contains isocyanates. May produce an allergic reaction.

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

· 2.3 Other hazards

Information according to UK REACH- Annex XVII.56

- Persons already sensitised to diisocyanates may develop allergic reactions when using this
- 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.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

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

Dangerous components:

CAS: 9016-87-9

Reg.nr.: EG: Polymer

diphenylmethanediisocyanate,isomeres and homologues <50%

Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373;
 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319;

Škin Sens. 1, H317; STOT SE 3, H335, EUH204

Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 %

Eye Irrit. 2; H319: C ≥ 5 %

Resp. Sens. 1; H334: C ≥ 0.1

STOT SE 3; H335: C ≥ 5 %

CAS: 72088-97-2 Isocyanate- Prepolymer MDI based <50%

Reg.nr.: EG: Polymer Resp. Sens. 1, H334; STOT RE 2, H373; (1) Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1,

H317; STOT SE 3, H335, EUH204

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Trade name: OTTOPUR Turbo Komp. B

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CAS: 101-68-8 diphenylmethane-4,4'-di-isocyanante <50%

EINECS: 202-966-0 Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Reg.nr.: 01-2119457014-47-xxxx Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319;

Škin Sens. 1, H317; STOT SE 3, H335, EUH204

Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 %

Eye Irrit. 2; H319: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1

STOT SE 3; H335: C ≥ 5 %

CAS: 5873-54-1 diphenylmethane-2,4'-diisocyanate <10%

EINECS: 227-534-9 🕸 Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Reg.nr.: 01-2119480143-45-xxxx Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319;

Škin Sens. 1, H317; STOT SE 3, H335, EUH204

Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 %

Resp. Sens. 1; H334: C ≥ 0.1

STOT SE 3; H335: C ≥ 5 %

CAS: 2536-05-2 EINECS: 219-799-4 diphenylmethane-2,2'-diisocyanate

<1%

Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319;

Škin Sens. 1, H317; STOT SE 3, H335, EUH204

Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 %

Eye Irrit. 2; H319: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1

STOT SE 3; H335: C ≥ 5 %

· Additional information 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

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing

Do not induce vomiting; call for medical help immediately. Show container or label.

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

After inhalation: Dry throat/throat pain. Cough. Irritation of the respiratory tract. Irritation of nasal mucous membranes. Runny nose. FOLLOWING SYMPTOMS MAY APPEAR LATER: Inflammation of the respiratory tract possible. Pulmonary oedema possible. Respiratory problems. After skin contact: Tingling/irritation of the skin. After eye contact: Irritation of eye tissue. Lacrimation.

Printing date 04.03.2024 Version 4 (replaces version 3) Revision: 04.03.2024

Trade name: OTTOPUR Turbo Komp. B

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents Water with full jet.
- · 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx)

Hydrogen cyanide (HCN)

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Mount respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13.

Allow to solidify. Pick up mechanically.

• 6.4 Reference to other sections See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

see item 8: Personal protective equipment

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Fumes can combine with air to form an explosive mixture.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

Prevent any seepage into the ground.

- Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

Sen; as -NCO

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101-68-8 diphenylmethane-4,4'-di-isocyanante

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

Sen: as -NCO

5873-54-1 diphenylmethane-2,4'-diisocyanate

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

Sen; as -NCO

2536-05-2 diphenylmethane-2,2'-diisocyanate

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

Sen; as -NCO

· Ingredients with biological limit values:

101-68-8 diphenylmethane-4,4'-di-isocyanante

BMGV 1 µmol creatinine/mol

Medium: urine

Sampling time: At the end of the period od exposure

Parameter: isocyanate-derived diamine

5873-54-1 diphenylmethane-2,4'-diisocyanate

BMGV 1 µmol creatinine/mol

Medium: urine

Sampling time: At the end of the period od exposure

Parameter: isocyanate-derived diamine

2536-05-2 diphenylmethane-2,2'-diisocyanate

BMGV 1 µmol creatinine/mol

Medium: urine

Sampling time: At the end of the period od exposure

Parameter: isocyanate-derived diamine

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

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.

- Hand protection Protective gloves.
- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Recommended glove material: Butyl rubber, BR

Recommended thickness of the material: >0.4 mm

- · Penetration time of glove material Breakthrough time: 10 30 min
- · Eye/face protection Safety glasses
- · Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Physical state

Fluid Aerosol

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· Colour: According to product specification

· Odour: Characteristic ... Melting point/freezing point: undetermined

· Melting point/freezing point: · Boiling point or initial boiling point and

boiling range 208 °C

· Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined.

· Flash point: 212 °C · Auto-ignition temperature: 400 °C

Decomposition temperature:
 pH
 Viscosity:
 Not determined.
 Not determined.
 Not determined.

·Solubility

· Water: Hydrolized

· Partition coefficient n-octanol/water (log

value) Not determined.
• Vapour pressure: Not determined.

Density and/or relative density

Density: see technical data sheet

Relative density
 Vapour density
 Relative gas density
 Particle characteristics
 Not determined
 undetermined
 undetermined

· 9.2 Other information

· Form: pasty

· Ignition temperature: Product is not selfigniting.

• **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Information with regard to physical hazard

classes
· Aerosols Void
· Flammable liquids Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Avoid strong heating.

· 10.3 Possibility of hazardous reactions

Danger of receptacles bursting because of high vapour pressure when heated

- · 10.5 Incompatible materials: Strong oxidizing agents, alkalis, amines, strong acides
- · 10.6 Hazardous decomposition products:

Hydrogen chloride (HCI)

Hydrogen cyanide (prussic acid)

see item 5.2

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if inhaled.

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· LD/LC50 values relevant for classification:

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

Oral LD50 >10,000 mg/kg (rat)

Dermal LD50 >9,400 mg/kg (rabbit)

Inhalative LC50/4 h 0.49 mg/l (rat)

101-68-8 diphenylmethane-4,4'-di-isocyanante

Oral LD50 >10,000 mg/kg (rat)
Dermal LD50 >9,400 mg/kg (rabbit)

5873-54-1 diphenylmethane-2,4'-diisocyanate

 Oral
 LD50
 >2,000 mg/kg (rat)

 Dermal
 LD50
 9,400 mg/kg (rabbit)

Inhalative LC50/4 h 0.387 mg/l (rat)

- Skin corrosion/irritation Causes skin irritation.
- · Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation

Sensitive people may react strongly to minimal concentrations. We advise asthmatics and people who tend to diseases of the respiratory tracts against the contact with this product.

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.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- 12.7 Other adverse effects
- Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

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

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Observe local by-laws.

Already cured material can be disposed of with the domestic or commercial waste. Unconsumed material (fluid, paste-like) is to dispose of as hazardous waste.

· Uncleaned packaging:

Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

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Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name

· ADR, ADN, IMDG, IATA Void

· 14.3 Transport hazard class(es)

· ADR, ADN, IMDG, IATA

· Class Void

· 14.4 Packing group

· ADR, IMDG, IATA Void

• 14.5 Environmental hazards: Not applicable. • 14.6 Special precautions for user Not applicable.

· 14.7 Maritime transport in bulk according to

IMO instruments Not applicable.

· Transport/Additional information: Not dangerous according to the above

specifications.

UN "Model Regulation": Void

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act
- · Regulated explosives precursors

None of the ingredients is listed.

· Regulated poisons

None of the ingredients is listed.

Reportable explosives precursors

None of the ingredients is listed.

Reportable poisons

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII

No. 56 for general public

No. 74 for commercial/industrial users

Conditions of restriction: 3, 56a, 56b, 56c, 74

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

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Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations

· Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Details of international registration status:

Listed on or in accordance with the following inventories:

UK REACH - Europe listed AICS - Australia not listed DSL - Canada not listed ECL - Korea not listed IECSC - China not listed ENCS - Japan not listed NZIoC - New Zealand not listed PICCS - Philippines not listed TCSI - Taiwan not listed TSCA - USA not listed

· 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. This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

Relevant phrases

- 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.

- · Department issuing SDS: Tel.: 0049- (0)8684- 908- 2363
- Contact: Tel.: 0049- (0)8684- 908- 2363 (-4300)
- Date of previous version: 02.06.2022
- · Version number of previous version: 3

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning

the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

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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.