Revision: 11.12.2024

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

Printing date 11.12.2024

Version 4 (replaces version 3)

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

- · 1.1 Product identifier
- · Trade name: OTTOPUR OP 960
- · **UFI:** 7581-Y0H2-U00S-FRYX
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · 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: alois.parzinger@otto-chemie.de · 1.4 Emergency telephone number:

Tel.: 0049/621/60-43333 (BASF Plant fire brigade)

+44 1865 407333 (Carechem 24)

DE: +49 (0)551 19240 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

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

Aerosol 1	H222-H22	9 Extremely flammable aerosol. Pressurised container: May burst if heated.
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.
Lact.	H362	May cause harm to breast-fed children.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 4 H413		May cause long lasting harmful effects to aquatic life.

^{· 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







· Signal word Danger

· Hazard-determining components of labelling:

Diphenylmethanediisocyanate, isomeres and oligomerics alkanes, C14-17, chloro

Reaction products of phosphoryl trichloride and 2-methyloxirane

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· Hazard statements

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

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.

H362 May cause harm to breast-fed children.

H335 May cause respiratory irritation.

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

H413 May cause long lasting harmful effects to aquatic life.

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 dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in

a position 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. Get medical advice/attention.

P312 Call a POISON CENTER/doctor if you feel unwell.

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

· Additional information:

As from 24 August 2023 adequate training is required before industrial or professional use. Buildup of explosive mixtures possible without sufficient ventilation.

· 2.3 Other hazards

Information according to UK REACH- Annex XVII.56

- 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.

Results of PBT and vPvB assessment

· PBT:

85535-85-9 alkanes, C14-17, chloro

· vPvB:

85535-85-9 alkanes, C14-17, chloro

Determination of endocrine-disrupting properties

This product does not contain components that are endocrine disruptors according to UK 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

NLP: 500-079-6

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

Dangerous components:

CAS: 115-10-6 dimethyl ether <25%

Reg.nr.: 01-2119472128-37

CAS: 32055-14-4 Diphenylmethanediisocyanate, isomeres and oligomerics <25%

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

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CAS: 1244733-77-4 Reaction products of phosphoryl trichloride and 2-methyloxirane <25%

EC number: 807-935-0 & Carc. 2, H351; 1 Acute Tox. 4, H302; Aquatic Chronic 3,

H412

CAS: 85535-85-9 alkanes, C14-17, chloro <2.5%

H362, EUH066 PBT: vPvB

· 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.

• **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.

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· 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.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

115-10-6 dimethyl ether

WEL Short-term value: 958 mg/m³, 500 ppm Long-term value: 766 mg/m³, 400 ppm

· 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

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· Body protection: Protective work clothing.

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Aerosol

· 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 applicable · Upper: not applicable

Flash point: Not applicable, as aerosol

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

·Solubility

· Water: Hydrolized

· Partition coefficient n-octanol/water (log

value)Not determined.Vapour pressure at 20 °C:5,100 hPa

Density and/or relative density

Density: see technical data sheet

Relative density
 Vapour density
 Particle characteristics
 Not determined.
 Not applicable.
 undetermined

· 9.2 Other information

· Form: Aerosol

· Ignition temperature: Not determined.

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

· Information with regard to physical hazard

classes

· **Aerosols** Extremely flammable aerosol. Pressurised container:

May burst if heated.

· 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

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Strong oxidizing agents, alkalis, amines, strong acides
- · 10.6 Hazardous decomposition products:

see item 5.2

Hydrogen chloride (HCI)

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Hydrogen cyanide (prussic acid)

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SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

115-10-6 dimethyl ether

Inhalative LC50/4 h 308 mg/l (rat)

32055-14-4 Diphenylmethanediisocyanate, isomeres and oligomerics

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

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

Inhalative LC50/4 h 310 mg/l (rat)

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)

- 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 May cause harm to breast-fed children.
- · 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

- · 12.1 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:

85535-85-9 alkanes, C14-17, chloro

· vPvB:

85535-85-9 alkanes, C14-17, chloro

· 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.

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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, IMDG, IATA UN1950

· 14.2 UN proper shipping name

· ADR 1950 AEROSOLS

· IMDG AEROSOLS, MARINE POLLUTANT

· IATA AEROSOLS, flammable

· 14.3 Transport hazard class(es)

· ADR



• **Class** 2 5F Gases. • **Label** 2.1

· IMDG





· Class 2.1 Gases. · Label 2.1

·IATA



· Class 2.1 Gases.

· Label 2.1

· 14.4 Packing group · ADR, IMDG, IATA

• 14.5 Environmental hazards: Product contains environmentally hazardous

substances: alkanes, C14-17, chloro

• Marine pollutant: Symbol (fish and tree) • 14.6 Special precautions for user Warning: Gases.

· Hazard identification number (Kemler code): -

· EMS Number: F-D,S-U

· Stowage Code SW1 Protected from sources of heat.

SW2 Clear of living quarters.

· Segregation Code SG69 For AEROSOLS with a maximum capacity of

Void

1 litre:

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Segregation as for class 9. Stow "separated from"

class 1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of

class 2.

For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of

class 2.

1L

· 14.7 Maritime transport in bulk according to

IMO instruments

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

· Transport category 2 · Tunnel restriction code D

· IMDG

· Limited quantities (LQ) 1L · Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

UN "Model Regulation": UN 1950 AEROSOLS, 2.1

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.
- · Seveso category P3a FLAMMABLE AEROSOLS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · 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.

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· 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:

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

- 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.
- H362 May cause harm to breast-fed children.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

- · Department issuing SDS: Tel.: 0049- (0)8684- 908- 2363
- · Contact: Tel.: 0049- (0)8684- 908- 2363 (-4300)
- · Date of previous version: 30.03.2023
- · 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

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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 (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Gas 1A: Flammable gases - Category 1A

Aerosol 1: Aerosols - Category 1

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

Lact.: Reproductive toxicity – effects on or via lactation

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3 Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

^{*} Data compared to the previous version altered.