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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

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

· **1.1 Product identifier**

· **Trade name: OTTOPUR OP 910**
· **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)8684/908-539

· **Further information obtainable from:**
Tel.: 0049- (0)8684- 908- 641 (-460)
E-Mail: alois.parzinger@otto-chemie.de
· **1.4 Emergency telephone number:**
Tel.: 0049- (0) 89- 192 40 (emergency telephone no.)
Tel.: 0049/621/60-43333 (BASF Plant fire brigade)

SECTION 2: Hazards identification

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

GHS02 flame

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.

GHS08 health hazard

Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2	H351	Suspected of causing cancer.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.

GHS07

Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335	May cause respiratory irritation.

· **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

· **Hazard-determining components of labelling:**
diphenylmethanediisocyanate,isomeres and homologues

(Contd. on page 2)

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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

Trade name: OTTOPUR OP 910

(Contd. of page 1)

· **Hazard statements**
H222-H229 Extremely flammable aerosol. 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**
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.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Additional information:**
Contains isocyanates. May produce an allergic reaction.
· **2.3 Other hazards**
Information according to 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:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.
· **Dangerous components:**

CAS: 9016-87-9 Reg.nr.: EG: Polymer	diphenylmethanediisocyanate,isomeres and homologues 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	≥10-<50%
EC number: 911-815-4 Reg.nr.: 01-2119486772-26-XXXX	Reaction mass of tris(2-chloropropyl) phosphate and tris(2-chloro-1-methylethyl) phosphate and Phosphoric acid Acute Tox. 4, H302	≥10-<25%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27	isobutane Flam. Gas 1, H220; Press. Gas C, H280	≥0.1-<10%
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37	dimethyl ether Flam. Gas 1, H220; Press. Gas C, H280	≥0.1-<10%

(Contd. on page 3)

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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

Trade name: OTTOPUR OP 910

(Contd. of page 2)

CAS: 74-98-6 propane ≥0.1-<10%
EINECS: 200-827-9 Flam. Gas 1, H220; Press. Gas C, H280
Reg.nr.: 01-2119486944-21
· **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**
Rinse out mouth and then drink plenty of water in small amounts (if person is conscious).
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/neck pain. Cough. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Running of the nose. CONSEQUENTIAL SYMPTOMS MAY OCCURE: Possible inflammation of the respiratory tract. Pulmonary edema possible. Difficulty breathing. After skin contact: Tingles/irritation of the skin. After eye contact: Irritation of the eye tissue. Lachrymal flow.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents**
BC powder
ABC powder
· **For safety reasons unsuitable extinguishing agents**
Foam.
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.

(Contd. on page 4)

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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

Trade name: OTTOPUR OP 910

(Contd. of page 3)

· **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 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.
Traces of flammable substances may collect in the steam chamber of enclosed systems. Keep clear ofignition sources.
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

· **Additional information about design of technical facilities:** No further data; see item 7.

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

9016-87-9 diphenylmethanediisocyanate,isomeres and homologues (≥10-<50%)

WEL Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

115-10-6 dimethyl ether (≥0.1-<10%)

WEL Short-term value: 958 mg/m³, 500 ppm
Long-term value: 766 mg/m³, 400 ppm
· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **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.
· **Protection of hands:** Protective gloves.

(Contd. on page 5)

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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

Trade name: OTTOPUR OP 910

(Contd. of page 4)

· **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.
PVC or PE gloves
Recommended thickness of the material: ≥ 0.025 mm
· **Penetration time of glove material** Breakthrough time: > 10 min
· **Eye 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**
· **Appearance:**

Form:	Aerosol
Colour:	Different according to colouring
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	Not applicable, as aerosol
· **Flash point:**	Not applicable, as aerosol
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Oxidising properties**	Not determined.
· **Vapour pressure:**	Not determined.
· **Density:**	see technical datasheet
· **Vapour density**	Not applicable.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Insoluble
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	Not determined.

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

(Contd. on page 6)

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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

Trade name: OTTOPUR OP 910

(Contd. of page 5)

· **10.5 Incompatible materials:** Strong oxidizing agents, alkalis, amines, strong acides
· **10.6 Hazardous decomposition products:**
Hydrogen chloride (HCl)
Hydrogen cyanide (prussic acid)
see item 5.2

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**
Harmful if inhaled.
· **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 (rbt)
Inhalative	LC50/4 h	0.49 mg/l (rat)

Reaction mass of tris(2-chloropropyl) phosphate and tris(2-chloro-1-methylethyl) phosphate and Phosphoric acid

Oral	LD50	632 mg/kg (rat)

115-10-6 dimethyl ether

Inhalative LC50/4 h 308 mg/l (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.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **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.

SECTION 12: Ecological information

· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.

(Contd. on page 7)

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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

Trade name: OTTOPUR OP 910

(Contd. of page 6)

· **vPvB:** Not applicable.

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**
· **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
· **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.
· **Danger code (Kemler):** -
· **EMS Number:** F-D,S-U
· **Stowage Code** SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· **Segregation Code** SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS

(Contd. on page 8)

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

Printing date 30.10.2018 Version 3 Revision: 30.10.2018

Trade name: OTTOPUR OP 910

(Contd. of page 7)

· | *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.*

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** | *Not applicable.*

· **Transport/Additional information:**

· **ADR**
· **Limited quantities (LQ)** *120 ml*
· **Excepted quantities (EQ)** *Code: E0*
Not permitted as Excepted Quantity
· **Transport category** *1*
· **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**

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*
· **Seveso category** *P3a FLAMMABLE AEROSOLS*

· **National regulations**

· **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:
TCSI - Taiwan listed
AICS - Australia listed
DSL- Canada listed
IECSC - China listed
ENCS - Japan not listed
REACH - Europe listed
TSCA - USA listed
ECL - Korea 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.

· **Relevant phrases**
H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H315 Causes skin irritation.

(Contd. on page 9)

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

Trade name: OTTOPUR OP 910

(Contd. of page 8)

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.

· **Department issuing SDS:** Tel.: 0049- (0)8684- 908- 641
· **Contact:** Tel.: 0049- (0)8684- 908- 641 (-460)
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport 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
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas C: 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.**