Printing date 11.03.2010 Revision: 11.03.2010

1 Identification of substance:

· Product details:

· Trade name: OTTOCOLL P 85

· Application of the substance / the preparation Preparation of adhesives

· 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

· Information in case of emergency: Tel.: 0049- (0)89- 192 40 (emergency telephone no.)

2 Hazards identification

· Hazard description:



Xn Harmful

· Information concerning to particular hazards to man and environment

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Harmful by inhalation. R 20

R 36/37/38 Irritating to eyes, respiratory system and skin.

Limited evidence of a carcinogenic effect. R 40

R 42/43 May cause sensitisation by inhalation and skin contact.

Harmful: danger of serious damage to health by prolonged exposure through inhalation. Contains isocyanates. See information supplied by the manufacturer

Classification system

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Additional information:

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.

3 Composition/information on ingredients

- · Chemical characterization
- · Description:

Prepolymer, based on diphenylmethandiisocyanat with monomeric and polymeric contents

Dangerous components:

CAS: 26447-40-5 methylenediphenyl diisocyanate

< 50% EINECS: 247-714-0 X Xn, Xi; R 20-36/37/38-40-42/43-48/20

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

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4 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.

5 Fire fighting measures

· 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.
- Special hazards caused by the substance, its products of combustion or resulting gases: Formation of toxic gases is possible during heating or in case of fire.
- · Protective equipment:

Mount respiratory protective device.

Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- · Person-related safety precautions: Ensure adequate ventilation
- Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
- Measures for cleaning/collecting:

Dispose contaminated material as waste according to item 13.

Pick up mechanically.

· Additional information: See Section 8 for information on personal protection equipment.

7 Handling and storage

- · Handling
- · Information 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.
- · Storage
- · Requirements to be met by storerooms and receptacles: 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.

8 Exposure controls and personal protection gear

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

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

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

- · Additional information: The lists valid during the making were used as basis.
- · 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.

· 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.

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR Natural rubber, NR

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

· Body protection: Protective work clothing.

9 Physical and chemical properties:

· General Information

Form: pasty

Colour: According to product specification

Odour: Characteristic

· Change in condition

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

• Flash point: Not applicable

· **Self-igniting:** Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

Density at 20℃: 1.46 g/cm³

· Solubility in / Miscibility with

Water: insoluble- reaction with water

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Avoid strong heating.

· Materials to be avoided:

If isocyanate gets in contact with humidity, carbon dioxide is released. The carbon dioxide causes an overpressure in closed containers.

· Dangerous reactions

Reacts with alcohols

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Reacts with amines Exothermic reaction

· Dangerous decomposition products: see item 5.3

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritating effects to skin and mucous membranes possible
- · on the eye: Irritating effect possible
- · Sensitization:

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.

Other information (about experimental toxicology):

After curing the material is odourless and completely harmless.

· Additional toxicological information:

Product has not been tested. Assessment is based on the ingredients. Observe the information in point 15.

· Sensitisation May cause sensitisation by inhalation and skin contact.

12 Ecological information:

- · Information about elimination (persistence and degradability):
- · Other information: The product is difficultly biodegradable.
- · Ecotoxical effects:
- · Remark: Due to mechanical actions of the product (e.g. agglutinations) damages may occur.
- · 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.

13 Disposal considerations

- · Product:
- · 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.

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class:
- · Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -

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

15 Regulations

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· Code letter and hazard designation of product:

Xn Harmful

· Hazard-determining components of labelling:

methylenediphenyl diisocyanate

· Risk phrases:

20 Harmful by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety phrases:

- 2 Keep out of the reach of children.
- 23 Do not breathe fumes/aerosol.
- 36/37 Wear suitable protective clothing and gloves.
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

- · 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.

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 R-phrases

20 Harmful by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

- Department issuing MSDS: Tel.: 0049- (0)8684- 908- 641
- · Contact: Tel.: 0049- (0)8684- 908- 641 (-460)
- * * Data compared to the previous version altered.