

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 12.08.2010

Revision: 12.08.2010

1 Identification of the substance/preparation and of the company/undertaking

- . **Product details**
- . **Trade name:** PU Max Liquid (bottle)
- . **Application of the substance / the preparation** Adhesive
- . **Manufacturer/Supplier:**
Bison International
Dr.A.F.Philipsstraat 9
NL-4462 EW Goes
PO Box 160
NL-4460 AD Goes
tel. +31 113 235700
fax. +31 113 232077
e mail: msds@bison.boltongroup.nl
- . **Further information obtainable from:** Bison R&D
- . **Information in case of emergency:** +31 113 235700

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.

- R 20 Harmful by inhalation.
- R 36/37/38 Irritating to eyes, respiratory system and skin.
- R 40 Limited evidence of a carcinogenic effect.
- R 42/43 May cause sensitisation by inhalation and skin contact.
- R 48/20 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.

- . **GHS label elements**

**Danger**

- 3.4/1 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- 3.2/2 - Causes skin irritation.
- 3.3/2A - Causes serious eye irritation.
- 3.4/1 - May cause an allergic skin reaction.
- 3.6/2 - Suspected of causing cancer.
- 3.9/2 - May cause damage to organs through prolonged or repeated exposure.

**Warning**

- 3.1/4 - Harmful if inhaled.
- 3.8/3 - May cause respiratory irritation. May cause drowsiness or dizziness.

(Contd. on page 2)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 12.08.2010

Revision: 12.08.2010

Trade name: PU Max Liquid (bottle)

(Contd. of page 1)

. Prevention:

Do not breathe dust/fume/gas/mist/vapours/spray.
In case of inadequate ventilation wear respiratory protection.

. Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).

. Storage:

Store locked up.

. Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients**. Chemical characterization:****. CAS No. Description**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

. Identification number(s)

. EINECS Number: 202-966-0

. Index number: 615-005-01-6

. Chemical characterization

. Description: Adhesive

. Dangerous components:

Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	50-100%
Xn, Xi; R 20-36/37/38-40-42/43-48/20	
Danger: health hazard 3.4.R/1, 3.2/2, 3.3/2A, 3.4.S/1, 3.6/2, 3.9/2	

Warning: exclamation mark 3.1.I/4, 3.8/3

CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues	25-50%
---	--------

EINECS: 202-966-0 Xn, Xi; R 20-36/37/38-40-42/43-48/20

Danger: health hazard 3.4.R/1, 3.2/2, 3.3/2A, 3.4.S/1, 3.6/2, 3.9/2

Warning: exclamation mark 3.1.I/4, 3.8/3

. Additional information:

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

4 First-aid measures**. General information:**

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.

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

. After skin contact: Immediately wash with water and soap and rinse thoroughly.**. After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

. After swallowing: Do not induce vomiting; call for medical help immediately.**5 Fire-fighting measures****. Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

(Contd. on page 3)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 12.08.2010

Revision: 12.08.2010

Trade name: PU Max Liquid (bottle)

(Contd. of page 2)

- . **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- . **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
- . **Measures for environmental protection:** No special measures required.
- . **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- . **Handling:**
- . **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- . **Information about fire - and explosion protection:** No special measures required.
- . **Storage:**
- . **Requirements to be met by storerooms and receptacles:** No special requirements.
- . **Information about storage in one common storage facility:** Not required.
- . **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls/personal protection

- . **Additional information about design of technical facilities:**
No further data; see item 7.
- . **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
- . **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.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
- . **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- . **Protection of hands:**
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- . **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the

(Contd. on page 4)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 12.08.2010

Revision: 12.08.2010

Trade name: PU Max Liquid (bottle)

(Contd. of page 3)

application.

. Penetration time of glove material

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

. For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

PVC or PE gloves

. Eye protection: Tightly sealed goggles**. Body protection:** Use protective suit.**9 Physical and chemical properties****. General Information**

Form:	Liquid
Colour:	According to product specification
Odour:	Characteristic

. Change in condition**Melting point/Melting range:** < 0°C**Boiling point/Boiling range:** 190°C**. Flash point:** > 100°C**. Ignition temperature:** 400°C**. Self-igniting:** Product is not selfigniting.**. Danger of explosion:** Product does not present an explosion hazard.**. Vapour pressure at 25°C:** 0.0002 hPa**. Density at 20°C:** 1.13 g/cm³**. Solubility in / Miscibility with water:** Not miscible or difficult to mix.**. Viscosity:****Dynamic at 20°C:** 4500 mPas**Solids content:** 100.0 %**10 Stability and reactivity****. Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

. Materials to be avoided:**. Dangerous reactions**

Reacts with alcohols.

Reacts with water.

Reacts with alkali, amines and strong acids.

. Dangerous decomposition products: Danger of forming toxic pyrolysis products.**11 Toxicological information****. Acute toxicity:****. Primary irritant effect:****. on the skin:** Irritant to skin and mucous membranes.**. on the eye:** Irritating effect.**. Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

(Contd. on page 5)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 12.08.2010

Revision: 12.08.2010

Trade name: PU Max Liquid (bottle)

(Contd. of page 4)

. Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

- . Sensitisation** May cause sensitisation by inhalation and skin contact.

*** 12 Ecological information****. Additional ecological information:**

- . General notes:** Generally not hazardous for water

13 Disposal considerations**. Product:****. Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

. Uncleaned packaging:**. Recommendation:**

Disposal must be made according to official regulations.

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: -

. UN "Model Regulation": -

*** 15 Regulatory information****. 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:

Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate diphenylmethanediisocyanate, isomeres and homologues

. Risk phrases:

20 Harmful by inhalation.

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

40 Limited evidence of a carcinogenic effect.

(Contd. on page 6)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 12.08.2010

Revision: 12.08.2010

Trade name: PU Max Liquid (bottle)

(Contd. of page 5)

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:

23 Do not breathe fumes.
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37 Wear suitable gloves.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
51 Use only in well-ventilated areas.

. Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

. National regulations:**. Technical instructions (air):****. Class Share in %**

. I 50-100

. **Waterhazard class:** Generally not 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.

- . **Department issuing MSDS:** R & D laboratory
- . **Contact:** M.L. de Jager
- . *** Data compared to the previous version altered.**