

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Printing date 30.05.2016

Revision: 30.05.2016

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

- Product details
- Trade name: **PenePurFoam Kom. B**
- Application of the substance / the preparation Polyurethane resin
- Manufacturer/Supplier:
Bau Profi Chemie GmbH
Willy Brandt Platz, 4
90402 Nuremberg
- Further information obtainable from: +49911-6214894
- Information in case of emergency: +49911-6214895

2 Hazards identification

- Hazard description:  Xn Harmful

- Information concerning particular hazards for human and environment:
R 20 Harmful by inhalation.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 42/43 May cause sensitisation by inhalation and skin contact.
Contains isocyanates. See information supplied by the manufacturer

3 Composition/information on ingredients



Chemical characterization

- CAS No. Description
9016-87-9 diphenylmethanediisocyanate, isomers and homologues
- Identification number(s)
- EU Number: 615-005-01-6

Chemical characterization

- Description: Mixture of substances listed below with nonhazardous additions.
- Dangerous components:

9016-87-9 diphenylmethanediisocyanate, isomers and homologues	50-100%
---	---------

 Xn,  Xi; R 20-36/37/38-42/43

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 stably in side position for transportation.
- After skin contact:
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing:
After swallowing: If symptoms persist consult doctor. If symptoms persist consult doctor.
- Information for doctor:
symptomatic treatment, no specific antidote known.
For pulmonary oedema prophylaxis: dexamethason aerosol.

5 Fire-fighting measures

- Suitable extinguishing agents:
Use fire extinguishing methods suitable to surrounding conditions.
Suitable extinguishing agents: dry extinguishing agents, foam, carbon dioxide (CO₂), water sprays.
The following may be released in a fire: carbon monoxide, carbon dioxide, nitrogen oxide, hydrocyanic acid, diphenylmethane-4,4'-diisocyanate.

(Contd. on page 2)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Printing date 30.05.2016

Revision: 30.05.2016

Trade name: PenePurFoam Kom. B

(Contd. on page 1)

Special equipment required: always wear gas mask and breathing equipment and protective overalls. Do not inhale gases or vapours.

Further information: Cool endangered containers with water. If the material overheats, danger of gaseous decomposition products being released; decomposition, danger of explosion.
Dispose of fire residues and contaminated water in accordance with local statutory regulations.
Collect contaminated water used for fire fighting separately, must not be allowed to enter sewage system or ground water.

6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**
Prevent seepage into sewage system, workpits and cellars.
- **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.
- **Additional information:**
See Section 8 for information on personal protection equipment.

7 Handling and storage

Handling:

- **Information for safe handling:** Keep receptacles tightly sealed.
- **Information about fire - and explosion protection:** No special measures required.

Storage:

- **Requirements to be met by storerooms and receptacles:**
Store in a tightly closed, dry, well-ventilated place. If material becomes damp, CO₂ generated, pressure increase, danger of explosion.
Do not store together with: acids, amines or products containing amines.
Store away from foodstuffs, animal feed, alcohol and tobacco.
Do not store below + 10 °C
- **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

MEL (GREAT BRITAIN)	Short-term value: 0.07 mg/m ³
	LONG-TERM VALUE: 0.02 MG/M ³
MEL (GREAT BRITAIN)	SEN; AS -NCO
	LONG-TERM VALUE: 0.05 MG/M ³ , 0.005 PPM

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

Personal protective equipment:

- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
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
- **Material of gloves**
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR

(Contd. on page 3)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Printing date 30.05.2016

Revision: 30.05.2016

Trade name: PenePurFoam Kom. B

(Contd. on page 2)

PVC 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 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.

- Eye protection:

Tightly sealed goggles

9 Physical and chemical properties

Form:	Fluid
Colour:	Brown
Odour:	Weak, characteristic
Change in condition Boiling point/Boiling range:	>260 °C (>500 °F)
Flash point:	> 200 °C (> 392 °F)
Ignition temperature:	>600 °C (>1112 °F)
Danger of explosion:	Product does not present an explosion hazard.
Vapour pressure at 20 °C (68 °F):	1*10 ⁻⁵ hPa (34*50-4 mm Hg)
Density at 20 °C (68 °F):	1.23 g/cm ³
Solubility in / Miscibility with water:	Not miscible or difficult to mix
Viscosity: Dynamic at 25 °C (77 °F):	230 mPas

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Dangerous reactions No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Acute toxicity:

- L D / L C 5 0 values relevant for classification :

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

ORAL	LD50	>15000 MG/KG (RATTE)
DERMAL	LD50	>5000 MG/KG (KANINCHEN)
INHALATIVE	LC50/4 h	490 MG/L (RATTE)

- 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.

- Other information (about experimental toxicology):

In the case of over-sensitive persons intensive contact may lead to sensitizing of the skin. Danger of sensitizing by continuous skin contact. May cause sensitizing of the respiratory system in the case of allergic persons.

Skin contact and inhaling aerosols must be avoided.

- Subacute to chronic toxicity:

Subacute-chronical toxicity

(Contd. on page 4)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Printing date 30.05.2016

Revision: 30.05.2016

Trade name: **PenePurFoam Kom. B**

(Contd. on page 3)

Length of trials: 2 years

Application: inhalative (rat): > 0.2 < 1 mg/m³ aerosol (PMDI).

Findings: when inhaled, the substance caused clear local irritation in the rats with epithelium damage.

Application: inhalative (rat): 6 mg/m³ aerosol (PMDI).

Findings: when inhaled, the substance caused clear local irritation in the rats with epithelium damage. Some of the animals also suffered local tumour growth after this.

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

12 Ecological information

- **Ecotoxicological effects:**
- **Remark:**

Reacts with water at the interface slowly releasing CO₂ to insoluble high melting polycarbamide.

Present experience is that this product is inert and non-degradab

- **General notes:**

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

13 Disposal considerations

Product:

- **Recommendation**

May be transported to controlled incinerator if local official regulations are observed or the product may be hardened with PMDI and can then be stored in domestic waste landfills or incinerated.

Completely emptied metal packaging materials can be disposed of in Germany through the KBS.

- **European waste catalogue:**

07 00 00 Wastes from organic chemical processes

07 02 00 waste from the MFSU of plastics, synthetic rubber and man-made fibres

07 02 08 other still bottoms and reaction residues

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID (cross-border)

- **ADR/RID class:**
- **Description of goods:** 2489 Diphenylmethane-4,4'-diisocyanate

- **Maritime transport IMDG:**
- **IMDG Class:**

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:**

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

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

- **Risk phrases:**

20 Harmful by inhalation.

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

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

- **Safety phrases:**

23 Do not breathe fumes/aerosol.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of water.

(Contd. on page 5)



SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Printing date 30.05.2016

Revision: 30.05.2016

Trade name: **PenePurFoam Kom. B**

(Contd. on page 4)

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

38 In case of insufficient ventilation, wear suitable respiratory equipment.

45 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:**

- **Breakdown regulations:**

Critical quantity values according to the regulations on accidents should be adhered to.

- **Technical instructions (air):**

- **Class** 1
Share 100 %

- **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.

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

* Data compared to the previous version altered.