

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.05.2016

Ver.-Nr: 4

Revision: 30.05.2016

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

- **Product identifier**
- **Trade name: PenePurFoam 65**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Polyurethane resin
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

Bau Profi Chemie GmbH
Willy Brandt Platz 4
D-90402 Nürnberg

- **Further information obtainable from:**
+49 (0)911-89632109
bpc.gmbh@gmail.com
- **Emergency telephone number:** +49 (0)176-17707788

2 Hazards identification

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



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

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+H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R20-40-48/20: Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

- **Information concerning particular hazards for human 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.

- **Classification system:**

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

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- **Label elements**

- **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:**

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.
- 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:**

- 9 23 Keep container in a well-ventilated place.
- 23 Do not breathe fumes/aerosol.
- 25 Avoid contact with eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective clothing and gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 60 This material and its container must be disposed of as hazardous waste.

- **Special labelling of certain preparations:**

Contains isocyanates. See information supplied by the manufacturer

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues	50-100%
Xn R20-40-48/20; Xn R42/43; Xi R36/37/38	
Carc. Cat. 3	
GHS08 Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; GHS07 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	
Polypropylenglykol	10-25%
Xn R22	
GHS07 Acute Tox. 4, H302	

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- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of 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 and to be sure call for a doctor.
In case of unconsciousness place patient stably 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:** If symptoms persist consult doctor.
- **Information for doctor:**
symptomatic treatment, no specific antidote known. For pulmonary oedema prophylaxis: dexamethason aerosol.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
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.

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.
Use fire extinguishing methods suitable to surrounding conditions.- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

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- **Reference to other sections** See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - When handling, make sure the working area is adequately ventilated.
 - When pumping, check pipes for tightness.
 - Aerosol formation must be avoided. Do not inhale vapours or aerosols.
 - If aerosols occur, always wear breathing equipment.
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **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.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
 - 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**
 - WEL (Great Britain) 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.
- **Exposure controls**
- **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.
 - 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.

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· 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

Butyl rubber, BR

Nitrile rubber, NBR

Chloroprene rubber, CR

Recommended thickness of the material: ≥ 0.5 mm

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

· Information on basic physical and chemical properties**· General Information****· Appearance:****Form:** Fluid**Colour:** Brown**· Odour:** Weak, characteristic**· Change in condition****Boiling point/Boiling range:** $> 260^{\circ}\text{C}$ ($> 500^{\circ}\text{F}$)**· Flash point:** $> 100^{\circ}\text{C}$ ($> 212^{\circ}\text{F}$)**· Ignition temperature:** 330°C (626°F)**· Self-igniting:** Product is not selfigniting.**· Danger of explosion:** Product does not present an explosion hazard.**· Density at 25°C (77°F):** 1.12 g/cm^3 (9.346 lbs/gal)**· Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

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- **Viscosity:**
Dynamic at 25°C (77 °F): 30 mPas

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 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
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.
- **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

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.

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

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
*Product should be preferably be hardened with water. The product can then be stored in domestic waste landfills or incinerated. Waste code (Europe): 120105 "plastic parts".
Must not be disposed together with household garbage. Do not allow product to reach sewage system.*
- **European waste catalogue**

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:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN "Model Regulation":** -
- **Special precautions for user** Not applicable.
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Technical instructions (air):**
- **Class Share in %**

· I	57.2
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- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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**

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

R20 Harmful by inhalation.

R22 Harmful if swallowed.

R36/37/38 4Irritating to eyes, respiratory system and skin.

R40 Limited evidence of a carcinogenic effect.

R42/43 May cause sensitisation by inhalation and skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

· **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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· *** Data compared to the previous version altered.**

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