

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

Printing date 26.01.2012

Revision: 26.01.2012

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

- **Product identifier**
- **Trade name** **BOTAMENT R 70 (Komponente B)**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** *Hardening agent/ Curing agent*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** *BOTAMENT Systembaustoffe  
Am Kruppwald 1  
D-46238 Bottrop*  
  
*Tel.: ++49(0)2041 101-90  
Fax.: ++49(0)2041 101-988*
- **Informing department:** *Product safety department.  
msds@botament.com*
- **Emergency telephone number:** *Tel.: ++49(0)178 310 10 43*

**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.*



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.*


- **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.*

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· **Classification system:** *The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.*

· **Label elements**

· **Labelling according to EU guidelines:**

*The product has been labelled in accordance with EC Directives / relevant national laws.  
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)*

· **Code letter and hazard designation of product:**



Xn Harmful

· **Hazard-determining components of labelling:**

*diphenylmethane-4,4'-di-isocyanate*

· **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 Keep container in a well-ventilated place.  
23 Do not breathe fumes/aerosol.  
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).*

· **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 the substances listed below with harmless additions.*

· **Dangerous components:**

CAS: 101-68-8 EINECS: 202-966-0	diphenylmethane-4,4'-di-isocyanate Xn R20-40-48/20; Xn R42/43; Xi R36/37/38 Carc. Cat. 3 Resp. Sens. 1, H334; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	50-70%
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· **Additional information**

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

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**4 First aid measures**

· **Description of first aid measures**

· **General information**

Take affected persons into the open air.  
Seek medical treatment.  
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 call for doctor for safety reasons.  
In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact**

Instantly wash with water and soap and rinse thoroughly.

· **After eye contact**

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

· **After swallowing**

Call a doctor immediately.

· **Information for doctor**

· **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Firefighting measures**

· **Extinguishing media**

· **Suitable extinguishing agents**

Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture**

Can be released in case of fire  
Carbon monoxide (CO)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.

· **Advice for firefighters**

· **Protective equipment:**

Put on breathing apparatus.

**6 Accidental release measures**

· **Personal precautions, protective equipment and emergency procedures**

Not required.

· **Environmental precautions:**

No special measures required.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of 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** Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- **Components with critical values that require monitoring at the workplace:**

**101-68-8 diphenylmethane-4,4'-di-isocyanate (50-70%)**

WEL ()	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.
- **Breathing equipment:** Short term filter device:  
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **Protection of hands:** Protective gloves.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  
After use of gloves apply skin-cleaning agents and skin cosmetics.
- **Material of gloves** Butyl rubber, BR

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Nitrile rubber, NBR

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

· **Eye protection:**

Tightly sealed safety glasses.

· **Body protection:**

Protective work clothing.

**9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Fluid  
    **Colour:** Whitish  
    **Smell:** Characteristic

· **Change in condition**

**Melting point/Melting range:** Not determined  
    **Boiling point/Boiling range:** 190°C

· **Flash point:** 141°C

· **Ignition temperature:** 400°C

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

· **Danger of explosion:** Product is not explosive.

· **Density at 20°C** 1.12 g/cm<sup>3</sup>

· **Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix  
    **Other information** No further relevant information available.

**10 Stability and reactivity**

· **Reactivity**

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions**

Reacts with amines

· **Conditions to avoid**

No further relevant information available.

· **Incompatible materials:**

No further relevant information available.

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- **Hazardous decomposition products:** No dangerous decomposition products known

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant for skin and mucous membranes.
- **on the eye:** Irritant effect.
- **Sensitization:** Sensitization possible by inhalation.  
Sensitization possible by skin contact.
- **Additional toxicological information:** The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

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**14 Transport information**

· <b>UN-Number</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>Transport hazard class(es)</b> · <b>ADR, ADN, IMDG, IATA</b> · <b>Class</b>	Void
· <b>Packing group</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

**15 Regulatory information**

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

*These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· <b>Relevant phrases</b>	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.
	R20	Harmful by inhalation.
	R36/37/38	Irritating 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.	

· **Department issuing data specification sheet:**

Environment protection department.

· **Contact:**

Mr. Hemming

· **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)

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*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*

*ICAO: International Civil Aviation Organization*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

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

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