

Date of issue: 31.01.2008 Replaces Data Sheet of : 22.03.2007

*** alterations as compared to previous version; n.ap. = not applicable; n.av. = not available



1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

- 1.1 **Identification of Substance or Preparation**
 Trade Name : R770, R777- Component B
 Article No. : n.av.
 Preparation No. : n.av.
 Registration No. : n.av.
- 1.2 **Use of the substance / preparation:**
 Adhesive
- 1.3 **Company / Undertaking Identification**
- 1.3.1 **Address of the Company / Supplier:**
 Bona GmbH, Jahnstraße 12, D - 65549 Limburg
 Telephone : +49-6431-4008-0, Fax : +49-6431-4008-25, e-mail: n.av.
- 1.3.2 **Responsible :**
 Chemie & Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf; E-Mail: info[at]chemie-vorschrift.de
- 1.4 **Emergency - Telephone**
 Information Centre Specialising in Symptoms of Poisoning Emergency - Telephone of Company / Undertaking
 Telephone : +49 - 761 - 19 240 Telephone : +49-6431-4008-0 (08:30 - 16:30)

2 HAZARDS IDENTIFICATION

- 2.1 **For Humans** (additional information is given under item 11) :
 Harmful. Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Symptoms may be delayed. (6 - 8h)
- 2.2 **For the Environment :**
 May cause long-term adverse effects in the aquatic environment.
- 2.3 **For Materials:**
 polyethylene containers must be solvent resistant

3 COMPOSITION / INFORMATION ON INGREDIENTS

- 3.1 **Chemical Characterisation:**
 Mixture of synthetic resin and additives
 - 3.2 **Dangerous Ingredients:**
- | CAS - No. | Index - No. | EEC - No. | Material | m% - range | Symbol | R - phrases |
|-----------|--------------|-----------|--|------------|--------|------------------|
| 9016-87-9 | 615-005-01-6 | n.av. | Polymethylenepolyphenyl polyisocyanate | > 50 | Xn | R 20-36/37/38-42 |

Remarks: Classification and labelling of a product is indicated under item 15.

4 FIRST AID MEASURES

- 4.1 **Inhalation:**
 Move to fresh air.
 If symptoms persist, call a physician.
- 4.2 **Skin Contact :**
 Wash off immediately with soap and plenty of water.
 If symptoms persist, call a physician.
- 4.3 **Eye Contact :**
 Rinse thoroughly with plenty of water, also under the eyelids.
 Obtain medical attention.
- 4.4 **Ingestion :**
 Do not induce vomiting.
 Clean mouth with water and drink afterwards plenty of water. Obtain medical attention.
- 4.5 **Note to Physician:**
 Aspiration may cause pulmonary oedema and pneumonitis.
 Keep under medical supervision for at least 48 hours.
- 4.6 **Special Equipment:**
 n.av.

Tradename : R770, R777- Component B

Company / Distributor : Bona GmbH, Jahnstraße 12, D - 65549 Limburg

Telephone : +49-6431-4008-0, **Date of issue:** 31.01.2008 **Replaces Data Sheet of :** 22.03.2007

5 FIRE FIGHTING MEASURES

- 5.1 **Suitable Extinguishing Media :** foam, dry powder, carbon dioxide (CO₂), water spray
- 5.2 **Extinguishing Media to Avoid :** high volume water jet
- 5.3 **Fire and Explosion Hazards :**
In the event of fire carbon oxides, nitrogen oxides (NO_x) may be formed.
- 5.4 **Special Protective Equipment :**
Wear positive pressure self-contained breathing apparatus.
Wear full protective clothing.
- 5.5 **Additional Information :** Cool containers / tanks with water spray.

6 ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal Precautions :**
See No. 8.3 Personal Protective Equipment. Contaminated surfaces will be extremely slippery. Ensure adequate ventilation.
- 6.2 **Environmental Precautions and Methods for Cleaning up :**
Do not flush into surface water or sanitary sewer system. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use mechanical handling equipment.
- 6.3 **Further Information :** None.

7 HANDLING AND STORAGE (For national regulations refer to item 15.2)

- 7.1 **Handling**
- 7.1.1 **Precautions for Safe Handling :**
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperature not exceeding 50°C.
- 7.1.2 **Precautions in Case of Fire and Explosion :**
No special protective measures against fire required.
- 7.2 **Storage**
- 7.2.1 **Storage Instructions :**
Jointless smooth floor Keep away from direct sunlight.
- 7.2.2 **Store away from :**
Incompatible with strong acids and oxidizing agents.
- 7.2.3 **Further Information on Storage Conditions :**
Keep away from direct sunlight. Keep at temperatures above .?°C. 10
- 7.3 **Specific use(s):**

8 Exposure Controls and Personal Protection

- 8.1 **Exposure limit values :**
- | Material | Limit Value : |
|----------|---------------|
| | |
- 8.2 **Exposure controls**
- 8.2.1 **Occupational exposure controls:**
Avoid contact with the skin and the eyes. Do not breathe vapours/dust. When using, do not eat, drink or smoke. Take off all contaminated clothing immediately.
- 8.2.1a **Respiratory Protection :** In case of insufficient ventilation, wear suitable respiratory equipment.
Breathing apparatus with filter. A
- 8.2.1b **Hand Protection :** solvent-resistant gloves (Viton)
Do not wear leather gloves, PVC or other plastic material gloves
- 8.2.1c **Eye Protection :** tightly fitting safety goggles
- 8.2.1d **Skin Protection :** protective suit
- 8.2.1e **Further Information :** Refer to special restrictions in wearing protective equipment
- 8.2.2 **Environmental exposure controls:** n.av.

Tradename : R770, R777- Component B

Company / Distributor : Bona GmbH, Jahnstraße 12, D - 65549 Limburg

Telephone : +49-6431-4008-0, **Date of issue:** 31.01.2008 **Replaces Data Sheet of :** 22.03.2007**9 Physical and Chemical Properties****9.1 General information**9.1.1 **Form** : liquid 9.1.2 **Colour** : brown 9.1.3 **Odour** : musty**9.2 Important health, safety and environmental information**

9.2.1 pH-value, undiluted : n.av., pH-value, 1% aqueous solution : n.av.
 9.2.2 Boiling point / Boiling - range (°C) : > 200, Melting point / Melting range (°C) : < 0
 9.2.3 Flash point (°C, c.c.) : > 200
 9.2.4 Flammability (EEC A10/A13) : n.av.
 9.2.5 Ignition temperature (°C) : > 530
 9.2.6 Autoflammability (EEC A16) : n.av.
 9.2.7 Oxidising properties : n.av.
 9.2.8 Explosion hazard : No.
 9.2.9 Explosion limits (Vol.%) lower : n.av., upper : n.av.
 9.2.10 Vapour pressure : < 10⁻⁵ mBar
 9.2.11 Density (g/ml) : 1,23
 9.2.12 Solubility (in Water) : immiscible Soluble in : miscible with most organic solvents
 9.2.13 Partition coefficient, n-Octanol/Water : n.av.
 9.2.14 Viscosity : 160 - 230 mPa*s
 9.2.15 Solvent separation test : n.av.
 9.2.16 Solvent content (m %) : 20 - 30%

9.3 Other information
 9.3.1 Thermal decomposition (°C) : n.av.
 9.3.2 Vapour density (Air = 1) : > 1, (Air = 1.0)
 9.3.3 Evaporation rate : n.av.

10 STABILITY AND REACTIVITY

10.1 **Conditions to Avoid** :
 Depolymerization starting from 65°C.
 10.2 **Materials to Avoid** :
 Incompatible with oxidizing agents.
 10.3 **Hazardous Decomposition Products** :
 isocyanides
 10.4 **Further Information** :
 Stable under normal conditions.

11 TOXICOLOGICAL INFORMATION**11.1 Toxicological Tests :****11.1.1 Acute Health Effects :**

Inhalation, LC₅₀ rat, (mg/l/4h) : ~ 400 (MDI)
 Ingestion, LD₅₀ rat, (mg/kg) : > 15.000 (MDI)
 Skin - contact, LD₅₀ rat, (mg/kg) : n.av.
 Irritation (to skin / eye) : Moderate skin irritation
 Sensitisation : May cause sensitization by inhalation and skin contact.

11.1.2 Subacute / Chronic Toxicity :

Carcinogenicity : n.av.
 Mutagenicity : n.av.
 Teratogenicity : n.av.
 Narcotic Effects : Inhalation of vapours in high concentration can cause narcotic effects and metabolic acidosis.

11.2 Practical Experience

11.2.1 Observations relevant for classification :
 None.
 11.2.2 Further Observations :
 Prolonged skin contact may cause skin irritation and/or dermatitis.

11.3 General Remarks :

Classification of the preparation has been done by calculation in accordance with EEC directives.

Tradename : R770, R777- Component B

Company / Distributor : Bona GmbH, Jahnstraße 12, D - 65549 Limburg

Telephone : +49-6431-4008-0, **Date of issue:** 31.01.2008 **Replaces Data Sheet of :** 22.03.2007

12 ECOLOGICAL INFORMATION

- 12.1 **Ecotoxicity :**
n.av.
- 12.2 **Mobility :**
n.av.
- 12.3 **Persistence and degradability:**
Decomposes slowly on exposure to water. The product can be degraded by abiotic (e.g. chemical or photolytic) processes.
- 12.4 **Bioaccumulative potential:**
n.av.
- 12.5 **Results of PBT assessment**
n.av.
- 12.6 **Other adverse effects**
- 12.6.1 COD-Value, mg/g : n.av.
- 12.6.2 BOD₅-Value, mg/g : n.av.
- 12.6.3 AOX-Remarks : n.av.
- 12.6.4 Significant Components : n.av.
- 12.6.5 Other adverse effects : None.

13 DISPOSAL CONSIDERATIONS (For national Regulations refer to item 15.)

- 13.1 **Residues**
- 13.1.1 Recommendation : D10; R1 Waste - Code - No. : 08 01 11
In addition comply with the regional authorities.
- 13.1.2 Safe Handling: See item 7 and 15.
- 13.2 **Contaminated Packaging**
- 13.2.1 Recommendation : Wash with suitable cleaner. Otherwise as described under Residues.
- 13.2.2 Safe Handling : As described under Residues.

14 TRANSPORT INFORMATION

- 14.1 **Transportation by Road or Railway according to ADR and RID**
- Remarks : Not a dangerous substance as defined in the above regulations.**
- Name and Description:**
- | | | |
|----------------------|-------------------|-------------|
| Class : | UN - No : | Risklabel: |
| Classification Code: | Packing Group : | Hazard-No.: |
| Transport-category: | Limited Quantity: | |
- 14.2 **Classification for Transportation by Inland-Navigation according to ADNO**
- Remarks : Classification has not been done.**
- Class : Division : Category :
- 14.2.1 **Description of Goods :**
- 14.2.2 **Remarks :**
- 14.3 **Classification for Transportation by Vessels according to IMDG**
- Remarks : Not a dangerous substance as defined in the above regulations.**
- | | | |
|---------|----------|-----------------|
| Class : | UN-No. : | Packing Group : |
|---------|----------|-----------------|
- 14.3.1 **EmS-No. :**
- 14.3.2 **Marine Pollutant :**
- 14.3.3 **Instruction for Declaration and Labelling :**
- Proper Shipping Name :**
- Risk Label :**
- 14.3.4 **Remarks :**

Tradename : R770, R777- Component B

Company / Distributor : Bona GmbH, Jahnstraße 12, D - 65549 Limburg

Telephone : +49-6431-4008-0, **Date of issue:** 31.01.2008 **Replaces Data Sheet of :** 22.03.2007**14.4 Classification for Transportation by Aeroplane according to IATA-DGR/CAO-TI****Remarks : Not a dangerous substance as defined in the above regulations.**

Class : UN-No. : Packing Group :

14.4.1 Instruction for Declaration and Labelling :**Proper Shipping Name :****Risk Label :**

Packing Instructions, Passenger : Cargo :

14.4.2 Remarks :**15 REGULATORY INFORMATION****15.1 Classification according to EEC-Regulations :**

Classification required by EEC : Yes.

Hazard Identification : Harmful

Component(s) : Contains Diphenylmethan-4,4'-diisocyanat

R-Phrases :

R20 - Harmful by inhalation.

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

R42/43 - May cause sensitization by inhalation and skin contact.

Applicable Exemptions : No.

Hazard Symbol(s) :

**S-Phrases :**

S 23: Do not breathe gas.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 - After contact with skin, wash immediately with plenty of water

S38 - In case of insufficient ventilation, wear suitable respiratory equipment.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Additional Markings :

Contains isocyanates. See information supplied by the manufacturer. Tactile warning of danger

15.1.1 The above mentioned labelling is valid for distribution to professional use.

Labelling (formats, exemptions, additional markings) has to be done according to respective regulations.

15.2 National Regulations

VOC-Content: n.av.

16 OTHER INFORMATION**Text of R phrases mentioned in Section 3**

R20 - Harmful by inhalation.

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

R42 - May cause sensitization by inhalation.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

Prepared by : Chemie & Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf, ☎ +49-228-74 81 824

Receipt of Data : 19.02.2003, \$bona058phrasneu