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

Product name: **DOLIT 846 Solution**  
Product no.: 94040075  
Revised on: 06.02.2008

Use of the substance/the preparation:  
Binding agent for epoxy resin coatings

Manufacturer/supplier:  
CRS Chemieschutz GmbH  
Bachstrasse 38  
D - 53639 Königswinter  
Germany

Information can be obtained under:  
Phone: +49-2223-928400  
Fax.: +49-2223-928461  
E-mail: info@crs-chemicalcare.com

Emergency phone number: +49-174-9574988 (Mon. - Fri. from 7 am to 4 pm)

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2. **Hazards identification:**

**Classification:** Xn - Harmful, N – Dangerous for the environment

**Information pertaining to special danger for human and environment:**  
Flammable. Possible risk of harm to the unborn child. Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

---

3. **Composition/Information on ingredients**  
**Chemical properties**  
Bisphenol-A-Epichlorhydrine resins MG <= 700 in solvents

**Hazardous ingredients:**

<table>
<thead>
<tr>
<th>Chem. name:</th>
<th>Bisphenol-A-Epichlorhydrine resins MG &lt;= 700</th>
<th>1,3,5-Trioxan</th>
<th>Xylol</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU no.:</td>
<td>500-033-5</td>
<td>203-812-5</td>
<td>215-535-7</td>
</tr>
<tr>
<td>REACH no.:</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index no.:</td>
<td>605-002-00-0</td>
<td>601-022-00-9</td>
<td></td>
</tr>
<tr>
<td>CAS no.:</td>
<td>25068-38-6</td>
<td>110-88-3</td>
<td>1330-20-7</td>
</tr>
<tr>
<td>Weight %</td>
<td>80 - 90</td>
<td>10 - 15</td>
<td>4 - 8</td>
</tr>
<tr>
<td>Symbol</td>
<td>Xi</td>
<td>F, Xn</td>
<td>Xn</td>
</tr>
<tr>
<td>R phrases</td>
<td>36/38-43-51/53</td>
<td>11-37-63</td>
<td>10-20/21-38</td>
</tr>
</tbody>
</table>

The wording of the stated hazard information can be taken from chapter 16.
4. First aid measures

**General information:**
Remove polluted clothing immediately.

**In case of inhalation:**
Call physician immediately. At irregular breathing or respiratory standstill apply artificial respiration.

**In case of skin contact:**
Wash with lots of water and soap immediately and rinse thoroughly. Take off polluted clothing immediately.

**In case of eye contact:**
Rinse eyes at open eye lid for several minutes under running water and consult physician.

**In case of ingestion:**
Rinse mouth and drink lots of water. Do not induce vomiting, call physician immediately.

5. Fire fighting measures

**Suitable extinguishing media:**
CO₂, fire extinguishing powder or water spray jet. Fight extensive fire by water spray jet or alcohol resistant foam

**Unsuitable fire extinguishing media because of safety reasons:**
Full water jet.

**Special danger by the material or the product itself, its combustion products or developing gases:**
During combustion carbon monoxide (CO) can be released:
Under certain fire conditions traces of poisonous material cannot be excluded, such as: formaldehyde.

**Special protective equipment for fire fighters:**
Wear full protective cloths, use respiratory protective mask.

**Additional notes:**
Collect contaminated water used for fire fighting separately and do not drain into public sewage system.
Fire residues and contaminated water used for fire fighting must be disposed of according to regulations of local authorities.

6. Accidental release measures

**Personal precautions:**
Keep away ignition sources, do not smoke. Wear protective equipment. Keep away unprotected persons.

**Environmental precautions:**
Avoid intruding into public sewage systems, trenches and basements. If waters or the sewage system have been polluted, notify the responsible authority.

**Methods for cleaning up:**
Wipe with fluid binding agents (e.g. sand, mountain flour, acid binder, sawdust, universal binding agent).
Disposal of contaminated material as waste according to point 13. Provide sufficient ventilation.
7. Handling and storage

**Handling:**

**Advices on safe handling:** Provide sufficient ventilation at work place. Store in well closed vessels under cool and dry conditions. Open and handle vessels with care.

**Precautions against fire and explosion:** Keep away from ignition sources – do not smoke. Take measures against electrostatic loads.

**Storage:**

**Technical measures and storage conditions:** Store cool and dry in well closed vessels.

**Requirements for storage rooms and vessels** Provide solvent resistant and leakage free floor. Ventilate storage and work rooms sufficiently.

**Additional information on storage conditions:**

**Storage class:** 3 (combustible fluid material, VCI concept)

8. Exposure controls / personal protection

**Exposure limit values**

<table>
<thead>
<tr>
<th>Limit value type</th>
<th>Substance</th>
<th>Limit value</th>
<th>CAS no.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGW TRGS 900 (D)</td>
<td>Xylol</td>
<td>100 ppm (440 mg/m³)</td>
<td>1330-20-7</td>
<td></td>
</tr>
</tbody>
</table>

**Personal protective equipment** (see also "Branchenregelung Säurebau" (Trade rules for acid protection construction))

**General protection and hygiene measures:**
Do not inhale gases/vapours/aerosol. Avoid eye and skin contact. Take off contaminated and soaked cloths immediately. Wash your hands prior to breaks and at end of shift. Use skin protection ointment.

**Respiratory protection:** Not required at sufficient ventilation. Use mask with combination filter at least filter class A1 or respiratory protection mask with external ventilation at exceeding the limit values.

**Hand protection:** Plastic gloves. (butyl rubber, nitrile rubber). The exact penetration time can be obtained from the manufacturer of the protective gloves and must be kept.

**Eye protection:** Safety goggles

**Body protection:** Occupational safety clothing
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>no colour</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Boiling point (°C):</td>
<td>&gt; 110</td>
</tr>
<tr>
<td>DIN 53 171</td>
<td></td>
</tr>
<tr>
<td>Flash point (°C):</td>
<td>~ 33</td>
</tr>
<tr>
<td>ISO 2719</td>
<td></td>
</tr>
<tr>
<td>Ignition temperature (°C):</td>
<td>&gt; 400</td>
</tr>
<tr>
<td>DIN 51 794</td>
<td></td>
</tr>
<tr>
<td>Explosions limits (Vol%):</td>
<td>lower: 1.0</td>
</tr>
<tr>
<td>DIN 51 794</td>
<td></td>
</tr>
<tr>
<td></td>
<td>upper: 12.3</td>
</tr>
<tr>
<td>Vapour pressure (mbar) at 20°C:</td>
<td>0.3</td>
</tr>
<tr>
<td>Density (g/cm³) at 20°C:</td>
<td>~ 1.12</td>
</tr>
<tr>
<td>Viscosity (mPa·s) at 20°C:</td>
<td>350</td>
</tr>
<tr>
<td>DIN 53018</td>
<td></td>
</tr>
<tr>
<td>Water solubility:</td>
<td>mixable</td>
</tr>
<tr>
<td>pH value (at 200 g/l H₂O):</td>
<td>4.5</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

**Conditions to avoid.** No decomposition if stored and handled as directed. Keep away ignition sources and open fire.

**Materials to avoid:** Oxidation agents

**Hazardous degrading products:** Carbon monoxide/dioxide and smoke can develop in case of fire.

11. Toxicological information

**Possible acute health effects:**

**In case of inhalation:** Irritates respiratory organs. May cause irritations.

**In case of ingestion:** May cause irritations on mucous membranes and digestive organs.

**In case of skin contact:** Irritates the skin. Risk of sensitisation in case of skin contact.

**In case of eye contact:** Irritates the eyes.

**Teratogenity:** Repr. Cat. 3 – Risk of damages to unborn child in womb.
12. Ecological information:

**General notes:**
Do not drain into ground water, into waters or public sewage system
Toxic for water organisms, can have long term adverse effects in waters.

13. Disposal considerations:

**Appropriate disposal/waste (product):** Dispose under observation of regulations from local authorities, e.g. bring to a suitable combustion plant.

**EAK/AVV waste codes:** Allocation of the waste code has to be made according to regulations as specially required for processes and types in the industry.

**Appropriate packaging:** Contaminated packages have to be emptied completely, following they can be recycled after appropriate cleaning. Vessels with residues and which are not cleaned and contain residual substances according to GefstoffV or EU guideline, respectively, are not subject to the packaging regulations, but are classified as hazardous waste. Disposal according to regulations of the responsible authorities.

14. Transport information

**Land transport ADR/RID/GGVSE**
- Class: 3
- UN-no.: 1263
- Hazard slip: 3
- Package group: III
- Substance name: UN 1263 Paint

**Sea ship transport IMDG/GGVSee**
- Class: 3
- UN-no.: 1263
- Label: 3
- Package group: III
- EMS-no.: F-E, S-B
- Marine pollutant: no
- Proper technical name: PAINT
- Cause of hazards:

**Air transport ICAO-TI and IATA-DGR**
- Class: 3
- UN/ID-Nr: 1263
- Package group: III
- Proper shipping name: PAINT
- Cause of hazards:
15. Regulatory information

**EU regulations**
The product is classified and labelled according to EU regulation/GefStoffV.

**Hazard symbol and hazard statements:**
Xn – Harmful, N – Dangerous for the environment

**Hazard determining components for labelling:**
Bisphenol-A-Epichlorhydrin resin with average molecular weight <= 700, 1,3,5,-Trioxan

**R phrases:**
- R 10  Flammable
- R 63  Possible risk of harm to the unborn child
- R36/38  Irritating to eyes and skin.
- R 43  May cause sensitisation by skin contact
- R 51/53  Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**S phrases:**
- S 36/37  Wear suitable protective clothing and gloves.

**Special provisions concerning the labelling of certain preparations:**
Contains epoxy compounds. Observe manufacturer’s instructions.

**National regulations (Germany):**
- **Classification according to Betriebssicherheitsverordnung (Operational reliability) (BetrSichV):** Inflammable
- **Water hazard class:** WGK 2 (risk of water hazards) (according to appendix 4 VwVwS of 17.05.1999)

**Other regulations, restrictions and prohibition regulations:**
- **BG leaflet:**
  - BGI 621 "Solvents" (M 017) (ZH 1/319)
  - The documentations of Plastics Europe "Epoxidharze und Härter" (epoxy resins and curing agents) and "Epoxidharzsysteme sicher handhaben" (safe handling of epoxy resin systems) must be observed! The regulations of the Professional Association and the generally recognized safety rules must be observed! Real protection measures and first aid measures for handling epoxy resins are documented in the BGR 227 and in the "Branchenregelung Säureschutzbau" (Trade rules for acid protection construction)!
16. Other information:

Relevant R phrases under section 3:

R 10  Flammable
R 11  Highly Flammable
R 20  Harmful by inhalation
R 20/21 Harmful by inhalation and in contact with skin
R 36/38 Irritating to eyes and skin
R 37  Irritating to respiratory system
R 38  Irritating to skin
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 43  May cause sensitisation by skin contact
R 63  Possible risk of harm to the unborn child

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