

Printing date 07/07/2003

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**1 Identification of substance**· Product details· Trade name: **Akepox 1005 Component A**· Article number: 10676, 10678· Application of the substance / the preparation Reaction resin· Manufacturer/Supplier: AKEMI Erich Höntsch GmbH  
Lechstrasse 28  
D 90451 NürnbergTel. +49(0)911-642960  
Fax. +49(0)911-644456  
e-mail info@akemi.de· Information department: Laboratory**2 Composition/Data on components**· Chemical characterization· Description: Mixture of the substances listed below with nonhazardous additions.· Dangerous components:

CAS: 25068-38-6	reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average 50-100%	
NLP: 500-033-5	molecular weight $\leq$ 700)	
EU Number: 603-074-00-8		

CAS: 26447-14-3	1,2-epoxy-3-(tolyloxy)propane	10-25%
EINECS: 247-711-4		
EU Number: 603-056-00-X		

CAS: 100-51-6	benzyl alcohol	10-25%
EINECS: 202-859-9		
EU Number: 603-057-00-5		

· Additional information: For the wording of the listed risk phrases refer to section 16.**3 Hazards identification**· Hazard description: Harmful  
Dangerous for the environment· Information pertaining to particular dangers for man and environment: Irritating to eyes and skin.  
May cause sensitization by skin contact.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
Possible risk of irreversible effects.  
Contains epoxy constituents. See information supplied by the manufacturer.· Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.· NFPA ratings (scale 0 - 4) Health = 2

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4) Health = 2

Fire = 0

Reactivity = 0

**4 First aid measures**· General information: Immediately remove any clothing soiled by the product.· 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: Clean with water and soap. If possible, also wash with polyethylene glycol 400.· After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.· After swallowing: Rinse out mouth and then drink plenty of water.

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Immediately call a doctor.

**5 Fire fighting measures**

- Suitable extinguishing agents: CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards caused by the material, its products of combustion or resulting gases: Formation of toxic gases is possible during heating or in case of fire.
- Protective equipment: Wear fully protective suit.  
Wear self-contained respiratory protective device.
- Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**6 Accidental release measures**

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection: Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.  
Do not allow to penetrate the ground/soil.
- Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Additional information: See Section 13 for disposal information.

**7 Handling and storage**

- Handling:
- Information for safe handling: Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.
- Storage:
- Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

**8 Exposure controls and personal protection**

- Additional information about design of technical systems: No further data; see item 7.
- Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation 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.
- Breathing equipment: Not necessary if room is well-ventilated.

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| <ul style="list-style-type: none"> <li>· <u>Protection of hands:</u></li> <li>· <u>Material of gloves</u></li> <li>· <u>Penetration time of glove material</u></li> <li>· <u>Eye protection:</u></li> <li>· <u>Body protection:</u></li> </ul> | <p>Protective gloves<br/>Plastic gloves<br/>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.</p> <p>The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.</p> <p>Tightly sealed goggles<br/>Protective work clothing</p> |
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## 9 Physical and chemical properties

### · General Information

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| <ul style="list-style-type: none"> <li>· <u>Form:</u></li> <li>· <u>Color:</u></li> <li>· <u>Odor:</u></li> <li>· <u>Change in condition</u></li> <li>· <u>Melting point/Melting range:</u></li> <li>· <u>Boiling point/Boiling range:</u></li> <li>· <u>Flash point:</u></li> <li>· <u>Ignition temperature:</u></li> <li>· <u>Decomposition temperature:</u></li> <li>· <u>Auto igniting:</u></li> <li>· <u>Danger of explosion:</u></li> <li>· <u>Vapor pressure at 20°C (68°F):</u></li> <li>· <u>Density at 20°C (68°F):</u></li> <li>· <u>Solubility in / Miscibility with Water:</u></li> <li>· <u>Viscosity:</u></li> <li>· <u>Dynamic at 20°C (68°F):</u></li> </ul> | <p>Fluid<br/>Light yellow<br/>Weak, characteristic</p> <p>Undetermined.<br/>Undetermined.</p> <p>&gt; 100°C (&gt; 212°F)<br/>&gt; 300 °C°C (&gt; 572 °C°F)<br/>&gt; 200 °C°C (&gt; 392 °C°F)</p> <p>Product is not selfigniting.<br/>Product does not present an explosion hazard.</p> <p>&lt; 2 hPa (&lt; 2 mm Hg)<br/>~ 1.14 g/cm<sup>3</sup><br/>Insoluble.</p> <p>400 - 600 mPas</p> |
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## 10 Stability and reactivity

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| <ul style="list-style-type: none"> <li>· <u>Thermal decomposition / conditions to be avoided:</u></li> <li>· <u>Dangerous reactions</u></li> <li>· <u>Dangerous products of decomposition:</u></li> </ul> | <p>No decomposition if used according to specifications.<br/>May produce violent reactions with bases and numerous organic substances including alcohols and amines.</p> <p>Irritant gases/vapors</p> |
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## 11 Toxicological information

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| <ul style="list-style-type: none"> <li>· <u>Acute toxicity:</u></li> <li>· <u>Primary irritant effect:</u></li> <li>· <u>on the skin:</u></li> <li>· <u>on the eye:</u></li> <li>· <u>Sensitization:</u></li> <li>· <u>Additional toxicological information:</u></li> </ul> | <p>Irritant to skin and mucous membranes.<br/>Irritating effect.<br/>Sensitization possible through skin contact.</p> <p>The product shows the following dangers according to internally approved calculation methods for preparations:<br/>Irritant</p> |
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**12 Ecological information**

- Ecotoxicological effects:
- Remark: Toxic for fish
- General notes: Water hazard class 2 (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms

**13 Disposal considerations**

- Product:
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.  
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

**14 Transport information**

- DOT regulations:
- Hazard class: 9
- Identification number: UN3082
- Packing group: III
- Proper shipping name (technical name): Environmentally hazardous substance, liquid, n.o.s., contains reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number averagemolecular weight  $\leq$  700), 1,2-epoxy-3-(tolyloxy)propane
- Label 9
- Land transport ADR/RID (cross-border):
- ADR/RID class: 9 (M6) Miscellaneous dangerous substances and articles
- Danger code (Kemler): 90
- UN-Number: 3082
- Packaging group: III
- Description of goods: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq$  700), 1,2-epoxy-3-(tolyloxy)propane)
- Maritime transport IMDG:
- IMDG Class: 9
- UN Number: 3082
- Label 9
- Packaging group: III
- Marine pollutant: Yes
- Propper shipping name: Environmentally hazardous substance, liquid, n.o.s., contains reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number averagemolecular weight  $\leq$  700), 1,2-epoxy-3-(tolyloxy)propane
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: 9
- UN/ID Number: 3082
- Label 9
- Packaging group: III
- Propper shipping name: Environmentally hazardous substance, liquid, n.o.s., contains reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number averagemolecular weight  $\leq$  700), 1,2-epoxy-3-(tolyloxy)propane

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**15 Regulations**

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- Section 355 (extremely hazardous substances):  
None of the ingredient is listed.
- Section 313 (Specific toxic chemical listings):  
None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):  
All ingredients are listed.
- Proposition 65
- Chemicals known to cause cancer:  
None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity:  
None of the ingredients is listed.
- Cancerogenity categories
- EPA (Environmental Protection Agency)  
None of the ingredients is listed.
- IARC (International Agency for Research on Cancer)  
None of the ingredients is listed.
- NTP (National Toxicology Program)  
None of the ingredients is listed.
- TLV (Threshold Limit Value established by ACGIH)  
None of the ingredients is listed.
- MAK (German Maximum Workplace Concentration)  
None of the ingredients is listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)  
None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)  
None of the ingredients is listed.
- Product related hazard informations:  
The product has been classified and marked in accordance with directives on hazardous materials.
- Hazard symbols:  
Harmful  
Dangerous for the environment
- Hazard-determining components of labelling:  
reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ )  
1,2-epoxy-3-(tolyloxy)propane
- Risk phrases:  
Irritating to eyes and skin.  
May cause sensitization by skin contact.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
Possible risk of irreversible effects.
- Safety phrases:  
Keep out of the reach of children.  
Avoid contact with skin and eyes.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point  
Wear suitable protective clothing, gloves and eye/face protection.  
If swallowed, seek medical advice immediately and show this container or label.
- Special labeling of certain preparations:  
Contains epoxy constituents. See information supplied by the manufacturer.

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· National regulations:

· Water hazard class: Water hazard class 2 (Self-assessment): 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.

· Contact: Dieter Zimmermann