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* **1 Identification of substance**

· Product details

- Trade name: **Akepox 1000 Component A**
- Article number: 10674, 10675, 10677, 10690, 10693, 11654, 11655, 11657
- Application of the substance / the preparation Reaction resin
- Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH Tel. +49(0)911-642960
Lechstrasse 28 Fax. +49(0)911-644456
D 90451 Nürnberg 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 = 700)

EU Number: 603-074-00-8 Xi, N; R 36/38-43-51/53

CAS: 2210-79-9 2,3-epoxypropyl o-tolyl ether 12.5-25%

EINECS: 218-645-3 Xn, N; R 38-43-68-51/53

EU Number: 603-056-00-X

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

* **3 Hazards identification**

· Hazard description:

Xn Harmful
N Dangerous for the environment

· Information pertaining to particular dangers for man 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.
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.

· Classification system:

Contains epoxy constituents. See information supplied by the manufacturer.
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.
Immediately call a doctor.

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5 Fire fighting measures

- Suitable extinguishing agents: CO₂, 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 penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.
- 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.
- Protection of hands: Protective gloves
- Material of gloves Butyl rubber, BR

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|--|---|
| <ul style="list-style-type: none"> · <u>Penetration time of glove material</u> · <u>Eye protection:</u> · <u>Body protection:</u> | <p>Nitrile rubber, NBR</p> <p>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</p> <p>Protective work clothing</p> |
|--|---|

* 9 Physical and chemical properties

· General Information

<u>Form:</u>	Fluid
<u>Color:</u>	Various colors
<u>Odor:</u>	Weak, characteristic

· Change in condition

<u>Melting point/Melting range:</u>	Undetermined.
<u>Boiling point/Boiling range:</u>	Undetermined.

- | | |
|---|---|
| · <u>Flash point:</u> | > 100°C (> 212°F) |
| · <u>Ignition temperature:</u> | > 300 °C°C (> 572 °C°F) |
| · <u>Decomposition temperature:</u> | > 200 °C°C (> 392 °C°F) |
| · <u>Auto igniting:</u> | Product is not selfigniting. |
| · <u>Danger of explosion:</u> | Product does not present an explosion hazard. |
| · <u>Vapor pressure at 20°C (68°F):</u> | < 2 hPa (< 2 mm Hg) |
| · <u>Density at 20°C (68°F):</u> | ~ 1.14 g/cm ³ |
| · <u>Solubility in / Miscibility with</u> | |
| <u>Water:</u> | Insoluble. |
| · <u>Viscosity:</u> | |
| <u>Dynamic at 20°C (68°F):</u> | 900 - 1100 mPas |

10 Stability and reactivity

- | | |
|--|---|
| · <u>Thermal decomposition / conditions to be avoided:</u> | No decomposition if used according to specifications. |
| · <u>Dangerous reactions</u> | May produce violent reactions with bases and numerous organic substances including alcohols and amines. |
| · <u>Dangerous products of decomposition:</u> | Irritant gases/vapors |

* 11 Toxicological information

- Acute toxicity:
 - LD/LC50 values that are relevant for classification:
- 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)**
- | | |
|--------|--------------------------|
| Oral | LD50 > 10000 mg/kg (rat) |
| Dermal | LD50 > 2000 mg/kg (rat) |
- Primary irritant effect:
 - on the skin: Irritant to skin and mucous membranes.
 - on the eye: Irritating effect.
 - Sensitization: Sensitization possible through skin contact.
 - Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

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* 12 Ecological information

- Ecotoxicological effects:
- Remark: Toxic for fish
- General notes: Do not allow product to reach ground water, water course or sewage system.
Water hazard class 2 (Self-assessment): hazardous for water
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. (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 = 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. (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. (reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number averagemolecular weight \leq 700), 1,2-epoxy-3-(tolyloxy)propane)

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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.

- Department issuing MSDS: Laboratory
- Contact: Dieter Zimmermann
- * Data compared to the previous version altered.

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