

Printing date 12/12/2005

Reviewed on 12/12/2005

* 1 Identification of substance

- Product details
- Trade name: **Akepox 2000 Component A**
- Article number: 10617, 10618, 10619
- Application of the substance / the preparation Epoxy resin adhesive
- 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%
molecular weight = 700) | |
| NLP: 500-033-5 | EU Number: 603-074-00-8 Xi, N; R 36/38-43-51/53 | |
| <hr/> | | |
| CAS: 9003-36-5 | reaction product: bisphenol F-(epichlorhydrin); epoxy resin (number average 12.5-25%
molecular weight ≤ 700) | |
| | Xi, N; R 36/38-43-51/53 | |
| CAS: 16096-31-4 | 1.6-hexanediol diglycidyl ether | 12.5-25% |
| | Xi; R 36/38-43-52/53 | |
- Additional information: For the wording of the listed risk phrases refer to section 16.

* 3 Hazards identification

- Hazard description: Xi Irritant
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
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: 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

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- Material of gloves Plastic gloves
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.
- 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 goggles
- Body protection: Protective work clothing

* 9 Physical and chemical properties

· General Information

Form: Fluid
 Color: Light yellow
 Odor: Weak, characteristic

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· Flash point:

Not applicable.

· Ignition temperature:

> 300 °C°C (> 572 °C°F)

· Decomposition temperature:

> 200 °C°C (> 392 °C°F)

· Auto igniting:

Product is not selfigniting.

· Danger of explosion:

Product does not present an explosion hazard.

· Vapor pressure at 20°C (68°F):

< 0.1 hPa (< 0 mm Hg)

· Density at 20°C (68°F):

~ 1.15 g/cm³

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Viscosity:

Dynamic at 20°C (68°F): 1600 - 1800 mPas

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Dangerous reactions

May produce violent reactions with bases and numerous organic substances including alcohols and amines.

· Dangerous products of decomposition:

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:

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Irritant

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* 12 Ecological information

- Ecotoxic 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), reaction product: bisphenol F-(epichlorhydrin); epoxy resin (number averagemolecular weight \leq 700))
- 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), reaction product: bisphenol F-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700))
- 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), reaction product: bisphenol F-(epichlorhydrin); epoxy resin (number averagemolecular weight \leq 700))
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: 9
- UN/ID Number: 3082
- Label 9
- Packaging group: III

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Trade name: **Akepox 2000 Component A**

· Propper shipping name:

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ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number averagemolecular weight \leq 700), reaction product: bisphenol F-(epichlorhydrin); epoxy resin (number averagemolecular weight \leq 700))

* 15 Regulations

· Sara

· 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 for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental 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:

Xi Irritant
N Dangerous for the environment

· Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
reaction product: bisphenol F-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700)
1.6-hexanediol diglycidyl ether

· 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

· 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

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- Special labeling of certain preparations: Contains epoxy constituents. See information supplied by the manufacturer.
- 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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