

Printing date 08.04.2008 Revision: 02.04.2008

1 Identification of substance:

• Product details:

• Trade name: EPIKOTE™ Resin 845

• Article number: 16-0252800/3

· Application of the substance / the preparation Epoxy resin systems

• Manufacturer/Supplier:

Hexion Specialty Chemicals B.V.

Postbus 606

3190 AN Hoogvliet Rt.

Netherlands

Tel.: +31 65 25 11 07 9

• Information:

see: Section 16 (Contact)

E-Mail: ulrich.busch@hexion.com

• Emergency information:

Emergency telephone number:

CARECHEM24

+44 (0) 2087 628322

2 Hazards identification

· Hazard designation:





Xi Irritant

N Dangerous for the environment

· Information pertaining to particular dangers for man and environment

R 36/38 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.

Contains epoxy constituents. See information supplied by the manufacturer.

• Additional information:

The residue of epichlorohydrin corresponds to the recommendations of PlasticsEurope (ERC):

Epoxy resins < 5 ppm (0,0005 %)</pre>

3 Composition/information on ingredients

- Chemical characterization:
- Identification number(s):
- EINECS Number: Not applicable (preparation)
- Chemical characterization
- Description: Epoxy resin

| • Dangerous components: | | |
|-------------------------|---|--------|
| CAS: 9003-36-5 | Bisphenol F-epichlorohydrin resin, mw ≤ 700 | > 50% |
| | Xi, N; R 36/38-43-51/53 | |
| 1 | Bisphenol A-epichlorohydrin resin, mw ≤ 700 | 25-50% |
| NLP: 500-033-5 | Xi, N; R 36/38-43-51/53 | |

• Additional information

For the wording of the listed risk phrases refer to section 16.

4 First aid measures

• General information Instantly remove any clothing soiled by the product.

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• After inhalation

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Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

· After skin contact

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

· After swallowing

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

5 Fire fighting measures

· Suitable extinguishing agents

CO2, extinguishing powder or water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

· For safety reasons unsuitable extinguishing agents

Water with a full water jet.

• Special hazards caused by the material, its products of combustion or resulting gases:

Can be released in case of fire

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

• Protective equipment:

Wear full protective suit.

Wear self-contained breathing apparatus.

• Additional information

Collect contaminated fire fighting water separately. It must not enter drains. 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:

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

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 containers:

Prevent any penetration into the ground.

• Information about storage in one common storage facility: Not required.

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• Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

• Additional information about design of technical systems:

No further data; see item 7.

- · Personal protective equipment
- · General protective and hygienic measures

Take off immediately all contaminated clothing Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin.

- Breathing equipment: Not necessary if room is well-ventilated.
- Protection of hands: Plastic gloves (EN 374)
- Material of gloves

Butyl rubber, BR Nitrile rubber, NBR

• Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Tightly sealed safety glasses (EN 166).
- Body protection: Protective work clothing (EN 340).

9 Physical and chemical properties:

• General Information

Form: Fluid Colour: Cloudy Yellow

Odour: Characteristic

· Change in condition

Melting point/Melting range: -

• Flash point: > 200°C (ISO 2719)

• Vapour pressure at 20°C: < 0.1 hPa

• Density at 20°C 1.16 - 1.19 g/cm3 (DIN 53217)

• Solubility in / Miscibility with

Water: Not miscible or difficult to mix

• Viscosity:

dynamic at 25°C: 2600 - 3200 mPa*s (ISO 9371)

10 Stability and reactivity

• Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Dangerous reactions

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

• Dangerous products of decomposition: Irritant gases/vapours

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11 Toxicological information

• Acute toxicity:

| • LD/LC50 values that are relevant for classification: | | |
|--|------|-----------------------|
| 9003-36-5 Bisphenol F-epichlorohydrin resin, mw ≤ 700 | | |
| Oral | LD50 | 23800 mg/kg (rat) |
| Dermal | LD50 | > 2000 mg/kg (rabbit) |
| 25068-38-6 Bisphenol A-epichlorohydrin resin, mw ≤ 700 | | |
| Oral | LD50 | 11400 mg/kg (rat) |
| Dermal | LD50 | > 2000 mg/kg (rabbit) |

- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritant effect.
- Sensitization: Sensitization possible by skin contact.

12 Ecological information:

• General notes:

Do not allow product to reach underground or surface water or sewage system.

13 Disposal considerations

- Product:
- Recommendation

Remove according to local authority recommendations, e.g. convey to a suitable incinerator.

• European waste catalogue

The waste code classification is to be carried out according to the European Waste Catalogue (EWC) specifically for each branch of industry and each type of process.

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

• Land transport ADR/RID (cross-border)

• ADR/RID Class: 9 Miscellaneous dangerous substances and articles.

Hazard Index Number: 90
 Substance Index Number: 3082
 Packaging group: III
 Label: 9

• Designation of goods: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (EPOXIDE DERIVATIVES)

• Maritime transport IMDG:

• IMDG Class: 9
• UN Number: 3082
• Label 9 + MP
• Packaging group: III
• EMS Number: F-A,S-F
• Marine pollutant: yes

• Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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• Air transport ICAO-TI and IATA-DGR:

• ICAO/IATA Class: 9
• UN/ID Number: 3082
• Label 9
• Packaging group: III

• Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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15 Regulatory information

· Designation according to EC guidelines:

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

· Code letter and hazard designation of product:

Xi Irritant

N Dangerous for the environment

• Hazard-determining components of labelling:

Bisphenol F-epichlorohydrin resin, mw ≤ 700 Bisphenol A-epichlorohydrin resin, mw < 700

• Risk phrases:

- 36/38 Irritating to eyes and skin.
- 43 May cause sensitisation by skin contact.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• Safety phrases:

- 24 Avoid contact with skin.
- After contact with skin, wash immediately with plenty of soap and water.
- 37/39 Wear suitable gloves and eye/face protection.
- 60 This material and its container must be disposed of as hazardous waste.
- 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

• Special designation of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

- · National regulations
- Other regulations, limitations and prohibitive regulations

Document of PlasticsEurope (ERC): "Epoxy resins and curing agents (Toxicology, Health, Safety and Environmental Aspects)"

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• Relevant R-phrases

These R-phrases refer to section 3: "Dangerous Components"

- 36/38 Irritating to eyes and skin.
- 43 May cause sensitisation by skin contact.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Department issuing data specification sheet: Product Safety Department
- Contact:

Product Safety Department Tel.: **49/203/4296-206

• * Data compared to the previous version altered.