SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name: EPOFIX RESIN

Container size: 1 l

Relevant identified uses of the substance or mixture and uses advised against

Application: For embedding and impregnation of materialographic specimens

Details of the supplier of the safety data sheet

Supplier: Struers Australia
27 Mayneview Street
Milton QLD 4064, Australia

Responsible for safety data sheet authoring: Responsible for safety data sheet authoring: DHI
Any questions to the contents of this safety data sheet should be sent to: struers@struers.dk

Emergency telephone number


+61 7 3512 9600
(Only during office hours)
SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

WHS:
- Skin corrosion/irritation - Category 2
- Serious eye damage/eye irritation - Category 2
- Skin Sensitisation - Category 1
- Chronic hazard to the aquatic environment - Category 2

Label elements

Warning

Contains:
- Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight <= 700)
- Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

P273 Avoid release to the environment.
P280 Wear protective clothing, gloves, eye and face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.

Other hazards

PBT/vPvB: Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: epoxy resin. (*)
SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation: Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and bring these instructions.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards: When heated and in case of fire, irritating vapours/gases may be formed.

Advice for firefighters

Protective equipment for firefighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.
SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Protective equipment: Avoid inhalation of vapours and aerosols and contact with skin and eyes. For personal protection, see section 8. (*)

Emergency procedures: No specific recommendations. For personal protection, see section 8. (*)

Environmental precautions

Methods and material for containment and cleaning up

Spill Cleanup Methods: Absorb spillage with suitable absorbent material.

Reference to other sections

References: For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice: Observe good chemical hygiene practices. Avoid inhalation of vapours and aerosols and contact with skin and eyes. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Technical measures: Work practice should minimise contact. Technical aids: Use disposable equipment (rags, brushes, spatulas, putty knives, etc.), if possible.

Technical precautions: First-aid equipment, including eye wash bottle, must be available at the work site.

Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: No special precautions.

Storage conditions: Store in closed original container in a dry place. Avoid contact with oxidising agents.

Specific end use(s)

Specific use(s): No information available.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
No occupational exposure limit assigned.

**Exposure controls**

**Engineering measures:** Mix and prepare in a place with efficient exhaust ventilation. An eye wash bottle must be available at the work site.

**Personal protection:** Personal protection equipment should be chosen according to relevant AS/NZS standards and in discussion with the supplier of the personal protective equipment.

**Respiratory equipment:** In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. It is recommended to use respiratory equipment with combination filter, type ABEK

**Hand protection:** Use disposable gloves protecting against epoxy along with cotton gloves closest to the skin. Laminate (PE/EVOH) gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

**Eye protection:** Wear goggles/face shield.

**Skin protection:** Risk of contact: Wear apron or protective clothing in case of splashes.

**Hygiene measures:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work. When using do not eat, drink or smoke.

**Environmental Exposure Controls:** Not available.
### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

(*)

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<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to pale yellow</td>
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<td>Odour</td>
<td>Mild</td>
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<tr>
<td>Odour threshold</td>
<td>Not available</td>
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<tr>
<td>pH</td>
<td>Not available</td>
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<tr>
<td>Melting point</td>
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<td>Boiling point</td>
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<td>Flash point</td>
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<tr>
<td>Evaporation rate</td>
<td>Not available</td>
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<tr>
<td>Flammability (solid, gas)</td>
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<td>Explosion limits</td>
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<tr>
<td>Vapour pressure</td>
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<td>Partition coefficient (n-octanol/water)</td>
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<td>Auto-ignition temperature (°C)</td>
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<tr>
<td>Decomposition temperature (°C)</td>
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<tr>
<td>Viscosity</td>
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<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidising properties</td>
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**Other information**

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<th>Property</th>
<th>Value</th>
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</thead>
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<tr>
<td>Other data:</td>
<td>Volatile Organic Compound (VOC): 0 g/l</td>
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SECTION 10: STABILITY AND REACTIVITY

Reactivity

Reactivity: No data available.

Chemical stability

Stability: Stable under normal temperature conditions.
Curing time: 12 hours

Possibility of hazardous reactions

Hazardous Reactions: Reacts with alkalis and amines generating excessive heat.

Conditions to avoid

Conditions/materials to avoid: Heating, moisture, water and amines. Strong oxidising substances, strong acids and strong bases.

Incompatible materials

Incompatible materials: Strong oxidising substances, strong acids and strong bases.

Hazardous decomposition products

Hazardous decomposition products: When heated and in case of fire, irritating vapours/gases may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.
Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.
Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: May cause an allergic skin reaction.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive Toxicity: Based on available data, the classification criteria are not met.
STOT - Single exposure: Based on available data, the classification criteria are not met.
STOT - Repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Not relevant at normal room temperatures. When heated, irritating vapours may be formed.
Ingestion: Irritating. May cause nausea, stomach pain and vomiting.
Specific effects: Carcinogenicity:
National Toxicology Program (NTP): No.
I.A.R.C. Monographs: No.
SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Ecotoxicity: Toxic to aquatic life with long lasting effects.

Persistence and degradability
Degradability: This product is expected to be not readily biodegradable.

Bioaccumulative potential
Bioaccumulative potential: The product contains potentially bioaccumulating substances.
log Pow: 3-5

Mobility in soil
Mobility: Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (Koc: >5000)
Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight <= 700) (Koc: 500-2000)

Results of PBT and vPvB assessment
PBT/vPvB: This product does not contain any PBT or vPvB substances.

Other adverse effects
Other adverse effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Waste from residues: Dispose of waste and residues in accordance with local authority requirements. For personal protection, see section 8. Hazardous characteristics of waste: H12 (Ecotoxic) (*) Note that fully cured material is not considered as hazardous waste.

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements.
SECTION 14: TRANSPORT INFORMATION

The product is covered by international regulation on the transport of dangerous goods (IMDG, IATA).

UN number

UN-No: 3082

UN proper shipping name

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin)

Additional IMDG information:
EmS: F-A, S-F
MFAG: 1

Transport hazard class(es)

Class: 9

Packing group

PG: III

Environmental hazards

Marine pollutant: Yes.
Environmentally Hazardous substance: Yes.

Special precautions for user

Special precautions: None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk: Not relevant.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Special provisions: AICS: Listed.

National model Code of Practice for the Labelling of Workplace Hazardous Chemicals (2011), with amendments.
The Industrial Chemicals (Notification and Assessment) Act 1989, as amended.
Hazardous Waste (Regulation of Exports and Imports) Act 1989, with amendments.
SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions. The following sections contain revisions or new statements: 3, 6, 9, 13. The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Additional information: Classification according to WHS Regulations 2011:
Calculation method.

Wording of H-statements:
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.