

SAFETY DATA SHEET



Product name: EPOFIX RESIN Page: 1/12
Revision Date: 2020-12-31 Print date: 2021-01-27
Document No.: M0025 SDS-ID: US-EN/22.0

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

Product identifier

Product name: EPOFIX RESIN
Cat. No. 40200030, 40200029, 40200088 (*)
Container size: 1 l, 5 l (*)

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

Application: For embedding and impregnation of materialographic specimens
Uses advised against: No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier: Struers ApS
Pederstrupvej 84
DK-2750 Ballerup
Tel:+45 44 600 800

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

Emergency telephone number

National Capital Poison Center: 1-800-222-1222

Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071

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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA 2012: Skin Irritant Category 2
Eye irritant Category 2A
Skin Sensitizer Category 1B
Aquatic Chronic Toxicity Category 2

Label elements



Warning

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 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.

P101 If medical advice is needed, have product container or label at hand.
P103 Read label before use.
P261 Avoid breathing gas, fume, vapors or spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local regulations.

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.

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OSHA 2012:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
60-90	1675-54-3	216-823-5	01-2119456619-26-xxxx	Bis[4-(2,3-epoxypropoxy)phenyl]propane	Skin Irritant Category 2 Eye irritant Category 2A Skin Sensitizer Category 1B Aquatic Chronic Toxicity Category 2	
10-40	68609-97-2	271-846-8	01-2119485289-22-xxxx	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Skin Irritant Category 2 Skin Sensitizer Category 1B	

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 vapors/gases may be formed.

Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid inhalation of vapors and aerosols and contact with skin and eyes. For personal protection, see section 8.

For emergency responders: No specific recommendations. For personal protection, see section 8.

Environmental precautions

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

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 vapors 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 minimize 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 oxidizing agents.

Specific end use(s)

Specific use(s): No information available.

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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 the ANSI 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. Butyl rubber 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.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form: Liquid.

Color: Colorless to pale yellow.

Odor: Mild.

Odor threshold: Not available.

pH: Not available.

Melting point: Not available.

Boiling point: >298.4°F

Flash point: 350.1 - 375.1°F

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Explosion limits: Not available.

Vapor pressure: 0.06 mmHg (69.8°F)

Vapor density: Not available.

Relative density: 1.11 - 1.14

Solubility: Insoluble in water.

Partition coefficient (n-octanol/water): Not available.

Auto-ignition temperature (°F): Not available.

Decomposition temperature (°F): Not available.

Viscosity: 600 - 800 cP (77°F)

Explosive properties: Not available.

Oxidizing properties: Not available.

Other information

Other data: Volatile Organic Compound (VOC): 0 g/l

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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 oxidizing substances, strong acids and strong bases.

Incompatible materials

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

Hazardous decomposition products

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

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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 sensitization: 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.
National Toxicology Program (NTP): No.
I.A.R.C. Monographs: No.
OSHA: No.

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 vapors may be formed.

Ingestion: Irritating. May cause nausea, stomach pain and vomiting.

Information on other hazards

Endocrine disrupting properties: Not determined. (*)

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SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity: Toxic to aquatic life with long lasting effects.

Bis[4-(2,3-epoxypropoxy)phenyl]propane:
LC50 (Oncorhynchus mykiss, 96 h): 2 mg/l

Persistence and degradability

Degradability: This product is expected to be heavily 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)
Bis[4-(2,3-epoxypropoxy)phenyl]propane (Koc: 500-2000)

Results of PBT and vPvB assessment

PBT/vPvB: This product does not contain any PBT or vPvB substances.

Endocrine disrupting properties

Endocrine disrupting properties: Not determined. (*)

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.
Note that fully cured material is not considered as hazardous waste.

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements.

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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.

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SECTION 15: REGULATORY INFORMATION

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

Special provisions: State and local regulation may apply.

TSCA: Listed.

NFPA Rating: Health:2 Fire:1 Reactivity:0 Other:-

SARA Section 302: No.

SARA Section 304: No.

SARA Section 313: No.

SARA (311/312) Hazard categories: Yes.

National regulation:

The following lists have been checked:

Threshold Limit Values (2020), ACGIH, by the American Conference on Governmental Industrial Hygienists.

The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Hazard Communication, with amendments.

The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Air contaminants (OSHA), with amendments.

NIOSH Pocket Guide to Chemical Hazards.

The Code of Federal Regulation, Title 40, part 261.33. Identification and listing of hazardous waste.

The Code of Federal Regulation. Title 40, part 372.65. Toxic Chemical Release Reporting: Community Right to Know.

The Code of Federal Regulation. Title 40, part 355.50. Emergency Planning and Notification.

The Code of Federal Regulation. Title 40, part 302.4. Designation, Reportable Quantities, and Notification.

The Code of Federal Regulation. Title 40, part 68.130. Chemical Accident Prevention Provisions.

U.S. Department of health and human services: 2016 - Report on Carcinogens - 14th Edition.

International Agency for Research on Cancer (IARC): IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Lyon: IARC, World Health Organization.
