1. IDENTIFICATION

Product identifier

Product name: SPECIFIX RESIN
Cat. No. 40200051, 40200048, 40200049

Container size: 1 l

Recommended use and restrictions on use

Application: For embedding and impregnation of materialographic specimens

Details of the supplier of the safety data sheet

Supplier: Struers Ltd
7275 West Credit Avenue
Ontario L5N 5M9 Mississauga
Canada
Tel: +1 (905) 8148855

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

Alberta & NWT:
Poison & Drug Information Service (PADIS): 1-800-332-1414

British Columbia:
Drug and Poison Information Centre (DPIC): 604-682-5050 / 1-800-567-8911

Ontario:
Poison Centre: 1-800-268-9017

Québec:
Poison Control Centre: 1-800-463-5060

Infotrac:
1-800-535-5053

Struers CAN:
+1 (905) 8148855
(Only during office hours)
2. HAZARDS IDENTIFICATION

Classification of the hazardous product

WHMIS 2015:
- Skin Irritation — Category 2
- Eye Irritation — Category 2
- Skin Sensitizer — Category 1
- 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.
P102 Keep out of reach of children.
P103 Read label before use.
P261 Avoid breathing gas, fume, vapours or spray.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P272 Contaminated work clothing should not be allowed out of the workplace.
P501 Dispose of contents/container in accordance with local regulations.

Other hazards
PBT/vPvB: No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: epoxy resin and additives. (*)
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 take along 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 take along 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.
5. FIRE-FIGHTING MEASURES

Extinguishing media

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

Specific hazards arising from the hazardous product

Specific hazards: By heating and fire, irritating vapors/gases may be formed.

Advice for fire-fighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

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

Environmental precautions

Environmental precautions: Do not 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 items

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

7. HANDLING AND STORAGE

Precautions for safe handling

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

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.
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 standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation, use air-supplied full-mask.

Hand protection: Wear protective gloves. 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: Wear apron or protective clothing in case of contact.

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.
### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colourless-pale yellow liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>slight odour</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>149°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt;0.01 Pa</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.15</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature (*)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature (*)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Other information**

| Other data                     | Volatile Organic Compound (VOC): 0 g/l |
10. STABILITY AND REACTIVITY

Reactivity:
None under normal conditions.

Chemical stability:
Stability: Stable under normal temperature conditions.
Curing time:
SPECIFIX-20: 8 hours
SPECIFIX-40: 3.5 hours (40-60 °C)

Possibility of hazardous reactions:
Hazardous Reactions: None under normal conditions.

Conditions to avoid:
Conditions/materials to avoid: No information available.

Incompatible materials:
Incompatible materials: No information available.

Hazardous decomposition products:
Hazardous decomposition products: By heating and fire, irritating vapors/gases may be formed.

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. IARC Not Listed.
NTP Not Listed.
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.
Specific effects: None known.
12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity: Toxic to aquatic life with long lasting effects.

Reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight <= 700): 1.3 (LC50 96 hours, fish, mg/l) (*)

Reaction product: bisphenol-F-(epichlorhydrin), epoxy resin (number average molecular weight <= 700): 2.54 (LC50 96 hours, fish, mg/l)

Persistence and degradability

Degradability: This product is expected to be heavily biodegradable.

Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil

Mobility: No data available.

Results of PBT and vPvB assessment

PBT/vPvB: No information available.

Other adverse effects

Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Contaminated packaging: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
14. TRANSPORT INFORMATION

The product is covered by national and international regulations on the transport of dangerous goods (TDG Regulations, IMDG, ICAO/IATA). 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
15. REGULATORY INFORMATION

Safety, health and environmental regulations specific to the product

Special provisions: This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

DSL: All chemicals included in the product are DSL listed or exempt.

National regulation:

Hazardous Products Regulations, with amendments.


Ontario: Control of Exposure to Biological or Chemical Agents R.R.O. 1990, Reg. 833, with amendments (2016).

Quebec: Regulation respecting the quality of the work environment, with amendments (2013-12-13).


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.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Additional information: Classification according to WHMIS 2015:
Calculation method.

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.