1. IDENTIFICATION

**Product identifier**

**Product name:** SPECIFIX - 20 CURING AGENT
Cat. No. 40200052, 40200048

**Container size:** 200 ml, 500 ml

**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:** 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:**

Acute (Oral) Toxicity — Category 4
Acute (Dermal) Toxicity — Category 3
Acute (Inhalation) Toxicity — Category 4
Skin Corrosion — Category 1A
Skin Sensitizer — Category 1
Serious Eye Damage — Category 1
Specific Target Organ Toxicity — Single Exposure — Category 3 (respiratory tract irritation)
3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: hardener.
4. FIRST-AID MEASURES

Description of first-aid measures

Inhalation: Move injured person into fresh air and keep person calm under observation. If necessary, seek hospital and bring these instructions. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. Immediately call an ambulance.

Skin contact: Flush immediately with plenty of water and remove contaminated clothing. Call an ambulance, continue to rinse during transportation to hospital and take along these instructions.

Eye contact: Immediately flush with plenty of water. Remove any contact lenses and open eyes wide apart. Call an ambulance and continue flushing during transportation to hospital taking along these instructions.

Ingestion: Immediately call a Poison Center/doctor. Rinse mouth. Do not induce vomiting. Do not drink anything without first consulting a doctor. Have these instructions at hand. (*)

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:** Use fire-extinguishing media appropriate for surrounding materials.
- **Unsuitable extinguishing media:** No specific precautions.

**Specific hazards arising from the hazardous product**

- **Specific hazards:** By heating and fire, very toxic nitrogen oxides may be formed.

**Advice for fire-fighters**

- **Protective equipment for fire-fighters:** 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 inhalation of vapors 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**

- **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 non-combustible, absorbent material.

**References 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 inhalation of vapors and aerosols and contact with skin and eyes. Immediately change contaminated clothes. Observe good chemical hygiene practices.
- **Technical measures:** Work practice should minimize contact.
- **Technical precautions:** Local exhaust is recommended. Provide easy access to water supply and eye wash facilities.

**Conditions for safe storage, including any incompatibilities**

- **Technical measures for safe storage:** No special precautions. Follow rules for flammable liquids.
- **Storage conditions:** Store in tightly closed original container in a dry, cool and well-ventilated place. Store locked up.

**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: Provide adequate ventilation. Local exhaust is recommended. 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 and work of brief duration, use suitable respiratory equipment. It is recommended to use respiratory equipment with combination filter, type ABEK.

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: Wash contaminated clothing before reuse.

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

Information on basic physical and chemical properties

Form: Liquid.
Colour: Yellow
Odour: characteristic
Odour threshold: Not available.
\( pH \): Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: 74.5°C
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Explosion limits: Not available.
Vapour pressure: Not available.
Vapour density: Not available.
Relative density: 0.86
Solubility: Not available.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature (°C): Not available.
Decomposition temperature (°C): Not available.
Viscosity: Not available.
Explosive properties: Not available.
Oxidising properties: Not available.

Other information

Other data: Volatile Organic Compound (VOC): 860 g/l (calculated)
10. STABILITY AND REACTIVITY

**Reactivity**
Reactivity: None under normal conditions.

**Chemical stability**
Stability: Stable under normal temperature conditions.

**Possibility of hazardous reactions**
Hazardous Reactions: No data available.

**Conditions to avoid**
Conditions/materials to avoid: Heating. Direct sunlight.

**Incompatible materials**
Incompatible materials: Reacts violently with strong oxidizing substances.

**Hazardous decomposition products**
Hazardous decomposition products: When heated and in case of fire, very toxic nitrogen oxides are formed.

11. TOXICOLOGICAL INFORMATION

**Information on toxicological effects**
Acute Toxicity (Oral): Harmful if swallowed.
Acute Toxicity (Dermal): Toxic in contact with skin.
Acute Toxicity (Inhalation): Harmful if inhaled.
Skin Corrosion/Irritation: Causes severe burns.
Serious eye damage/irritation: Causes serious eye damage.
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: May cause respiratory irritation.
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: After 24-36 hours, injured persons may develop serious shortness of breath and lung edema.
Skin contact: Toxicological information on ingredients.
Diethylaminopropylamine: LD50 (Dermal, Rabbit): 525 mg/kg
2-Methyl-1,5-pentamethylen-diamine: LD50 (oral, rat): 1690 mg/kg

**Ingestion:** Toxicological information on ingredients.
Diethylaminopropylamine: LD50 (oral, rat): 830 mg/kg
12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity: The environmental hazard of the product is considered to be limited.

Persistence and degradability
Degradability: The product is 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: This product does not contain any PBT or vPvB substances.

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 international regulation on the transport of dangerous goods (IMDG, IATA).

**UN number**

**UN-No:** 2735

**UN proper shipping name**

**Proper Shipping Name:** AMINES, LIQUID, CORROSIVE, N.O.S. (2-Methyl-1,5-pentamethylen-diamine)

Additional IMDG information:

- EmS: F-A, S-B
- MFAG: 1
- Segregation Group: Alkali

**Transport hazard class(es)**

**Class:** 8

**Packing group**

**PG:** I

**Environmental hazards**

- **Marine pollutant:** No.
- **Environmentally Hazardous substance:** No.

**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: 4.
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.