

Product name: SPECIFIX - 20 CURING AGENT
Revision Date: 2019-03-29
Document No.: M0074

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SDS-ID: CA-EN/21.1

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)

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Label elements



Danger

H302 + H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
P260	Do not breathe gas, fume, vapours or spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.
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.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Other hazards

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

Other: Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: hardener.

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WHMIS 2015:

<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>
90-100	15520-10-2	239-556-6	01-2119976310-41-xxxx	2-Methyl-1,5-pentamethylenediamine	Acute (Oral) Toxicity Category 4 Acute (Dermal) Toxicity Category 4 Acute (Inhalation) Toxicity Category 4 Skin Corrosion Category 1A Serious Eye Damage Category 1 Specific Target Organ Toxicity Single Exposure Category 3	
1-10	104-78-9	203-236-4	01-2119965402-39-xxxx	Diethylaminopropylamine	Flammable Liquids Category 3 Acute (Dermal) Toxicity Category 3 Acute (Oral) Toxicity Category 4 Skin Corrosion Category 1A Serious Eye Damage Category 1 Skin Sensitizer Category 1	

4. FIRST-AID MEASURES

Description of first-aid measures

<u>Inhalation:</u>	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.
<u>Skin contact:</u>	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.
<u>Eye contact:</u>	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.
<u>Ingestion:</u>	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.

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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.

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 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.

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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.

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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)

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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

Ingestion: Toxicological information on ingredients.
Diethylaminopropylamine: LD50 (oral, rat): 830 mg/kg
2-Methyl-1,5-pentamethylen-diamine: LD50 (oral, rat): 1690 mg/kg

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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.

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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

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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.
Alberta: Occupational Health and Safety Code 2009.
British Columbia: Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, with amendments (2015).
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).
International Agency for Research on Cancer (IARC): IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Lyon: IARC, World Health Organization.

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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.
www.dhigroup.com.
