1. IDENTIFICATION

Product identifier

Product name: VIAFIX LIQUID
Cat. No. 40200069, 40200067
Container size: 500 ml, 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: 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:

Flammable Liquids — Category 3
Skin Irritation — Category 2
Eye Irritation — Category 2
Skin Sensitizer — Category 1
Specific Target Organ Toxicity — Single Exposure — Category 3 (respiratory tract irritation)
Aquatic Acute Toxicity — Category 1
Aquatic Chronic Toxicity — Category 2
SAFETY DATA SHEET

Product name: VIAFIX LIQUID
Revision Date: 2018-11-09
Document No.: M0145

Label elements

Warning
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P301 Dispose of contents/container in accordance with local regulations.
P271 Use only outdoors or in a well-ventilated area.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P339 In case of fire: Use alcohol resistant foam, carbon dioxide or dry powder to extinguish.
P337 + P378 Store in a well-ventilated place. Keep container tightly closed.
P233 Other hazards

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

PBT/vPvB: No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures
The product contains: acrylates and additives.
4. FIRST-AID MEASURES

**Description of first-aid measures**

**Burns:**flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

**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. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

**Specific hazards arising from the hazardous product**

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

**Advice for fire-fighters**

Protective equipment for fire-fighters: Use air-supplied respirator during fire fighting.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Protective equipment: Do not smoke or use open fire, or other sources of ignition. Avoid inhalation of vapors 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: Remove sources of ignition. Dam and absorb spillages with sand, earth or other non-combustible 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 contact with skin and eyes. Observe good chemical hygiene practices.

Technical measures: Work practice should minimize contact.

Technical precautions: Local exhaust is recommended.

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


Storage conditions: Store in tightly closed original container in a well-ventilated 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:** Provide adequate ventilation. Minimize the risk of inhalation of vapours. Provide easy access to water supply and eye wash facilities.

**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 respiratory equipment with gas filter, type A2.

**Hand protection:** Wear protective gloves. Laminate (PE/EVOH) gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. 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.

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

Information on basic physical and chemical properties

(*)

Form: Liquid.
Colour: Colourless.
Odour: Ester.
Odour threshold: Not available.
pH: Not available.
Melting point: Not available.
Boiling point: 155°C
Flash point: 43°C
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Explosion limits: 2-8 vol%
Vapour pressure: 47 hPa (20°C)
Vapour density: Not available.
Relative density: 0,89
Solubility: insoluble in water
Partition coefficient (n-octanol/water): log Pow: = 1,38
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): 778 g/l (calculated)
10. STABILITY AND REACTIVITY

Reactivity
Reactivity: No data available.

Chemical stability
Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions
Hazardous Reactions: No data available.

Conditions to avoid
Conditions/materials to avoid: Avoid exposure to high temperatures or direct sunlight.

Incompatible materials
Incompatible materials: Avoid contact with oxidizing agents.

Hazardous decomposition products
Hazardous decomposition products: By heating and fire, toxic 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.
National Toxicology Program (NTP): No.
IARC Cancer Review: Group 2B for N,N-Dimethyl-p-toluidine
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: Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Ingestion: Irritating. May be absorbed in the body and cause dizziness, nausea and vomiting.
Specific effects: Frequent inhalation of even small concentrations may cause irritability, fatigue and memory failure and eventually permanent damage to the nervous system, including the brain.
12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Persistence and degradability
Degradability: The product is readily 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: None known.

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

**UN number**

UN-No: 1866

**UN proper shipping name**

Proper Shipping Name: RESIN SOLUTION, flammable (Isobutyl methacrylate)

Additional IMDG information:

EmS: F-E, S-E
MFAG: 1

**Transport hazard class(es)**

Class: 3

**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.
Canadian Environmental Protection Act, Reporting for the Domestic Substances List (DSL), with amendments.
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: 6, 9.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

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.