

Product name:	CLAROCIT LIQUID	Page:	1/10
Revision Date:	2016-12-01	Print date:	2016-12-01
Document No.:	M0159	SDS-ID:	GB-EN/12.1

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

1.1. Product identifier

Product name: CLAROCIT LIQUID
Cat. No. 40200073, 40200072

Container size: 500 ml, 1 l

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

Application: For embedding of materialographic specimens

1.3. Details of the supplier of the safety data sheet

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

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

1.4. Emergency telephone number

Emergency telephone: NHS Direct: 0845 46 47 (England or Wales)
NHS 24: 08454 24 24 24 (Scotland) (*)

+45 44 600 800
(Only during office hours)

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP:
Flam. Liq. 2;H225
Skin Irrit. 2;H315
Skin Sens. 1;H317
STOT SE 3;H335

2.2. Label elements



Danger

Contains:
Methyl methacrylate
Tetramethylene dimethacrylate
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

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.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures.

PBT/vPvB: Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: organic solvents, binders and additives.

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CLP:

<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>
60-100	80-62-6	201-297-1	-	Methyl methacrylate	Flam. Liq. 2;H225 STOT SE 3;H335 Skin Irrit. 2;H315 Skin Sens. 1;H317	D
1-5	67-64-1	200-662-2	-	Acetone	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066	
1-5	2082-81-7	218-218-1	-	Tetramethylene dimethacrylate	Skin Sens. 1B;H317	

References: The full text for all hazard statements is displayed in section 16.

SECTION 4: FIRST AID MEASURES

4.1. 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 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 up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and 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.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Not known.

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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards: During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not smoke or use open fire, or other sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. In case of inadequate ventilation: Use air-supplied respirator.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Remove sources of ignition. Dam and absorb spillages with sand, earth or other non-combustible material.

6.4. Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Do not smoke or use open fire or other sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. Observe good chemical hygiene practices.

Technical measures: Work practice should minimise contact.

Technical precautions: Local exhaust is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: Follow rules for flammable liquids.

Storage conditions: Store in tightly closed original container in a well-ventilated place.

7.3. Specific end use(s)

Specific use(s): Not relevant.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>		<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
67-64-1	Acetone	-	500 ppm	1210 mg/m3	TWA	-	EH40
		-	1500 ppm	3620 mg/m3	STEL	15min	
80-62-6	Methyl methacrylate	-	50 ppm	208 mg/m3	TWA	-	EH40
		-	100 ppm	416 mg/m3	STEL	15min	

8.2. Exposure controls

<u>Engineering measures:</u>	Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. Provide easy access to water supply and eye wash facilities.
<u>Personal protection:</u>	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<u>Respiratory equipment:</u>	In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Use respiratory equipment with gas filter, type A2.
<u>Hand protection:</u>	Wear protective gloves. Lamine (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.
<u>Eye protection:</u>	Wear goggles/face shield.
<u>Skin protection:</u>	Risk of contact: Wear apron or protective clothing in case of splashes.
<u>Hygiene measures:</u>	Remove contaminated clothing and wash the skin thoroughly with soap and water after work. When using do not eat, drink or smoke.
<u>Environmental Exposure Controls:</u>	Not available.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<u>Appearance:</u>	Liquid.
<u>Odour:</u>	Ester.
<u>pH:</u>	Not available.
<u>Boiling point:</u>	101 °C
<u>Flash point:</u>	10 °C
<u>Explosive limits</u>	2,1-12,5 vol%
<u>Vapour pressure:</u>	47 hPa (20 °C)
<u>Relative density:</u>	Not available.
<u>Solubility:</u>	Miscible with water.

9.2. Other information

<u>Other data:</u>	Volatile Organic Compound (VOC): 691 g/l (calculated)
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

<u>Reactivity:</u>	None known.
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10.2. Chemical stability

<u>Stability:</u>	Stable under normal temperature conditions.
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10.3. Possibility of hazardous reactions

<u>Hazardous Reactions:</u>	None known.
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10.4. Conditions to avoid

<u>Conditions/materials to avoid:</u>	Avoid exposure to high temperatures or direct sunlight. Avoid contact with oxidising agents.
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10.5. Incompatible materials

<u>Incompatible materials:</u>	None known.
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10.6. Hazardous decomposition products

<u>Hazardous decomposition products:</u>	None in particular.
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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

<u>Acute Toxicity (Oral):</u>	Based on available data the classification criteria are not met.
<u>Acute Toxicity (Dermal):</u>	Based on available data the classification criteria are not met.
<u>Acute Toxicity (Inhalation):</u>	Based on available data the classification criteria are not met.
<u>Skin Corrosion/Irritation:</u>	Causes skin irritation.
<u>Serious eye damage/irritation:</u>	Based on available data the classification criteria are not met.
<u>Respiratory or skin sensitisation:</u>	May cause an allergic skin reaction.
<u>Germ cell mutagenicity:</u>	Based on available data the classification criteria are not met.
<u>Carcinogenicity:</u>	Based on available data the classification criteria are not met.
<u>Reproductive Toxicity:</u>	Based on available data the classification criteria are not met.
<u>STOT - Single exposure:</u>	May cause respiratory irritation.
<u>STOT - Repeated exposure:</u>	Based on available data the classification criteria are not met.
<u>Aspiration hazard:</u>	Based on available data the classification criteria are not met.
<u>Inhalation:</u>	Vapours may cause headache, fatigue, dizziness and nausea.
<u>Skin contact:</u>	Contains components which may penetrate the skin.
<u>Eye contact:</u>	May irritate and cause redness and pain.
<u>Ingestion:</u>	Irritating. May be absorbed in the body and cause dizziness, nausea and vomiting.
<u>Specific effects:</u>	Frequent inhalation of even small concentrations may cause irritability, fatigue and memory failure and eventually permanent damage to the nervous system, including the brain.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: The product is not expected to be hazardous to the environment.

12.2. Persistence and degradability

Degradability: The degradability of the product has not been stated.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB: Not relevant.

12.6. Other adverse effects

Other adverse effects: None known.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues: Dispose of waste and residues in accordance with local authority requirements.
Waste is classified as hazardous waste.

EWC-code: 16 05 08

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

SECTION 14: TRANSPORT INFORMATION

The product is covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

UN-No: 1866

14.2. UN proper shipping name

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

Additional IMDG information:

EmS: F-E, S-E

MFAG: 1

14.3. Transport hazard class(es)

Class: 3

14.4. Packing group

PG: II

14.5. Environmental hazards

Marine pollutant: No.

Environmentally Hazardous substance: No.

14.6. Special precautions for user

Special precautions: None known.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk: Not relevant.

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SECTION 15: REGULATORY INFORMATION

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

Special provisions: As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

National regulation: Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
Statutory Instruments 2008 No. 2852 - The REACH Enforcement Regulations 2008.
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
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EH40/2005, Workplace exposure limits 2005, with amendments.
The Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242), with amendments.
The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2. Chemical Safety Assessment

CSA status: Not relevant.

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SECTION 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: 1.

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

Approved by DHI.



Additional information:

Classification according to Regulation (EC) No. 1272/2008:
Calculation method.

Wording of R-phrases/H-statements:

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly 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.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

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.