

 Product name:
 CLAROCIT LIQUID
 Page:
 1/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

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

<u>Application:</u> For embedding of materialographic specimens

1.3. Details of the supplier of the safety data sheet

Supplier: Struers A/S

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

Responsible for safety data Responsible for safety data sheet authoring: DHI

sheet authoring: Any questions to the contents of this safety data sheet should be sent to:

Chemical.info@struers.dk

1.4. Emergency telephone number

Emergency telephone: +45 44 600 800

(Only during office hours)

 Product name:
 CLAROCIT LIQUID
 Page:
 2/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The product is classified:

67/548/EEC / 1999/45/EC: F;R11 R43 Xi;R37/38

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

2.2. Label elements



Danger

Contains: Methyl 2-methylprop-2-enoate

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 clothing and gloves.
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 and binders .

67/548/EEC:

<u>%:</u>	CAS-No.:	EC No.:	REACH Reg. No:	<u>Chemical name:</u>	Hazard classification:	Notes:
60-100	80-62-6	201-297-1	-	Methyl 2-methylprop-2-enoate	F;R11 R43 Xi;R37/38	D
1-5	67-64-1	200-662-2	-	Acetone	F;R11 Xi;R36 R66 R67	
1-5	2082-81-7	218-218-1	-	Tetramethylene dimethacrylate	Xi;R36/37/38	

 Product name:
 CLAROCIT LIQUID
 Page:
 3/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

GHS/CLP:

<u>%:</u>	CAS-No.:	EC No.:	REACH Reg. No:	Chemical name:	Hazard classification:	Notes:
60-100	80-62-6	201-297-1	-	Methyl 2-methylprop-2-enoate	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	Eye Irrit. 2;H319 Skin Irrit. 2;H315 STOT SE 3;H335	

References: The full text for all R-phrases and hazard statements are 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.

<u>Ingestion:</u> 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.

 Product name:
 CLAROCIT LIQUID
 Page:
 4/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

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.

5.2. Special hazards arising from the substance or mixture

<u>Specific hazards:</u> During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

<u>Protective equipment for</u> Selection of respiratory protection for fire fighting: follow the general fire

<u>fire-fighters:</u> 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

<u>Environmental</u> Avoid discharge into drains, water courses or onto the ground.

precautions:

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.

<u>Technical measures:</u> Work practice should minimise contact.

<u>Technical precautions:</u> Local exhaust is recommended.

7.2. Conditions for safe storage, including any incompatibilities

<u>Technical measures for safe</u> Follow rules for flammable liquids.

storage:

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

7.3. Specific end use(s)

Specific use(s): Not relevant.

 Product name:
 CLAROCIT LIQUID
 Page:
 5/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

CAS-No.:	Chemical name:	As:	<u>Expos</u>	Exposure limits:		Notes:	References:
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

Engineering measures: 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.

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.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: liquid

Odour: characteristic

Flash point: 10 °C

Explosion limits: 2,1-12,5 vol%

Relative density: 0,95

Solubility: Miscible with water.

9.2. Other information

Other data: Volatile Organic Compound (VOC): 691 g/l (calculated)

 Product name:
 CLAROCIT LIQUID
 Page:
 6/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: None known.

10.2. Chemical stability

<u>Stability:</u> Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Reactions: None known.

10.4. Conditions to avoid

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

oxidising agents.

10.5. Incompatible materials

<u>Incompatible materials:</u> None known.

10.6. Hazardous decomposition products

Hazardous decomposition

None in particular.

products:

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

<u>Inhalation:</u> May cause respiratory irritation. Vapours may cause headache, fatigue, dizziness

and nausea.

Skin contact: Causes skin irritation. May cause an allergic skin reaction. Contains components

which may penetrate the skin.

Eye contact: May irritate and cause redness and pain.

Ingestion: 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.

 Product name:
 CLAROCIT LIQUID
 Page:
 7/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

<u>Ecotoxicity:</u> The product is not expected to be hazardous to the environment.

12.2. Persistence and degradability

<u>Degradability:</u> 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.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

Waste from residues: EWC-code: 16 05 08

Product name:CLAROCIT LIQUIDPage:8/10Revision Date:2014-11-18Print date:2014-11-18Document No.:M0159SDS-ID:GB-EN/9.0

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

<u>UN-No:</u> 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:

14.5. Environmental hazards

Marine pollutant: No. Environmentally Hazardous No.

substance:

14.6. Special precautions for user

Special precautions: None known.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

<u>Transport in bulk:</u> Not relevant.

 Product name:
 CLAROCIT LIQUID
 Page:
 9/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

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.

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009

(S.I 2009 No. 716).

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.

 Product name:
 CLAROCIT LIQUID
 Page:
 10/10

 Revision Date:
 2014-11-18
 Print date:
 2014-11-18

 Document No.:
 M0159
 SDS-ID:
 GB-EN/9.0

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: 2.

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

Approved by DHI.

Allan Vorup

Additional information: Classification according to Regulation (EC) No. 1272/2008:

Calculation method.

Wording of

R-phrases/H-statements:

R11 Highly flammable.
R36 Irritating to eyes.

R36/37/38 Irritating to eyes, respiratory system and skin.

R37/38 Irritating to respiratory system and skin.

R43 May cause sensitisation by skin contact.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

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.

any other product or any other process is the responsibility of the user.

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

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