

Product name: CLAROFAST
Revision Date: 2013-11-25
Document No.: M0155

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SDS-ID: US-EN/9.0

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

Product identifier

Product name: CLAROFAST
Cat. No. 40100053, 40100054, 40100055
Container size: 1; 7.5; 25 kg

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

Application: For embedding of specimens

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 material safety data sheet authoring: Responsible for material safety data sheet authoring: DHI
Any questions to the contents of this material safety data sheet should be sent to:
Lisbeth.Mygind@struers.dk

Emergency telephone number

Emergency telephone: Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

The product is not classified.

Physical and Chemical Hazards: The dangerous properties of the product are considered limited. Fine particles may form explosive vapor/air mixtures.

Human health: The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals. Inhalation of dust may irritate the respiratory system. May irritate eyes and skin.

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

Label elements

Based on information from the manufacturer regarding the chemical composition, the product is not liable to classification, but the following labeling must be applied:

NFPA Rating: Health:1 Fire:1 Reactivity:0 Other:-

Contains Methyl methacrylate, Dibenzoyl peroxide. May produce an allergic reaction.

Other hazards

PBT/vPvB: Not relevant.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: acrylic resin.

67/548/EEC:

<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	-	-	-	Methacrylate polymer	-	
0,1-<1	80-62-6	201-297-1	-	Methyl methacrylate	F;R11 R43 Xi;R37/38	D
0,1-<1	94-36-0	202-327-6	-	Dibenzoyl peroxide	E;R3 O;R7 Xi;R36 R43	

GHS:

<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	-	-	-	Methacrylate polymer	-	
0,1-<1	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
0,1-<1	94-36-0	202-327-6	-	Dibenzoyl peroxide	Org. Perox. B;H241 Eye Irrit. 2;H319 Skin Sens. 1;H317	

References: The full text for all R-phrases and hazard statements are displayed in section 16.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

<u>Inhalation:</u>	Move into fresh air and keep at rest.
<u>Skin contact:</u>	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.
<u>Eye contact:</u>	Immediately flush with plenty of water for up to 10 minutes. Remove any contact lenses and open eyelids widely.
<u>Ingestion:</u>	Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable take to hospital along with these instructions.

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: Not known.

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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Special hazards arising from the substance or mixture

Specific hazards: No specific precautions.

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

Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin and eyes.

Environmental precautions

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

Methods and material for containment and cleaning up

Spill Cleanup Methods: Dampen spillage with water. Collect spillage with granulates, sawdust, rags or other absorbent.

Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice: Observe good chemical hygiene practices. Avoid inhalation of dust and contact with skin and eyes.

Technical measures: Avoid spreading dust.

Technical precautions: Local exhaust is recommended.

Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: No special precautions.

Storage conditions: Store in tightly closed original container.

Specific end use(s)

Specific use(s): Not relevant.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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>
80-62-6	Methyl methacrylate	-	50 ppm		TWA	SEN; A4	ACGIH
		-	100 ppm		STEL	SEN; A4; 15min	
94-36-0	Benzoyl peroxide	-		5 mg/m3	TWA	A4	ACGIH
-	Particles (Insoluble or Poorly Soluble), not Otherwise Specified, respirable particles	-		3 mg/m3	TWA	-	ACGIH
-	Particles (Insoluble or Poorly Soluble), not Otherwise Specified, inhalable particles	-		10 mg/m3	TWA	-	ACGIH
80-62-6	Methyl methacrylate	-	100 ppm	410 mg/m3	TWA	-	OSHA
94-36-0	Benzoyl peroxide	-		5 mg/m3	TWA	-	OSHA
-	Particulates not otherwise regulated (PNOR), respirable fraction	-		5 mg/m3	TWA	-	OSHA
-	Particulates not otherwise regulated (PNOR), total dust	-		15 mg/m3	TWA	-	OSHA

Notes:

SEN: Sensitizer.

A4: Not Classifiable as a Human Carcinogen.

Exposure controls

Engineering measures:

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust. Local exhaust is recommended.

Personal protection:

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment:

During dust-raising work: Use respiratory equipment with particle filter, type P2.

Hand protection:

Risk of contact: Wear protective gloves. Lamine (PE/EVOH) 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:

Risk of contact: Wear goggles/face shield.

Skin protection:

No special precautions.

Environmental Exposure

Not available.

Controls:

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: Solid., white
Odor: characteristic
pH: Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Explosion limits: Not available.
Relative density: 1,18
Solubility: insoluble in water

Other information

Other data: VOC (Volatile Organic Substances): <10 g/l (calculated)

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Reactivity: None known.

Chemical stability

Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions

Hazardous Reactions: None known.

Conditions to avoid

Conditions/materials to avoid: None specific.

Incompatible materials

Hazardous decomposition products

Hazardous decomposition products: When heated and in case of fire, irritating vapors/gases may be formed.

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SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhalation: Dust may irritate throat and respiratory system and cause coughing.

Skin contact: Prolonged contact may cause redness and irritation.

Eye contact: Dust in the eyes will cause irritation.

Ingestion: May irritate and cause malaise.

Specific effects: The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals.

Carcinogenicity:
National Toxicology Program (NTP): No.
I.A.R.C. Monographs: No.
OSHA: No.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

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

Persistence and degradability

Degradability: The product is not biodegradable.

Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation: Is not expected to be bio-accumulable.

Mobility in soil

Mobility: No data available.

Results of PBT and vPvB assessment

PBT/vPvB: Not relevant.

Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Note that fully cured material is not considered as hazardous waste.

Waste from residues: EWC-code: 16 05 09

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SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

UN number

UN-No: -

UN proper shipping name

Proper Shipping Name: -

Transport hazard class(es)

Class: -

Packing group

PG: -

Environmental hazards

Marine pollutant: -

Environmentally Hazardous substance: -

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.

SECTION 15: REGULATORY INFORMATION

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

Special provisions: TSCA: Listed.

National regulation: Europe/USA:
This Material Safety Data Sheet has been prepared according to the EU-regulation.
Threshold Limit Values (2013), ACGIH, by the American Conference on Governmental Industrial Hygienists.
The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Air contaminants (OSHA), with amendments.

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: -

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

Approved by DHI.

Allan Vorup

Wording of H-statements:

R3	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R7	May cause fire.
R11	Highly flammable.
R36	Irritating to eyes.
R37/38	Irritating to respiratory system and skin.
R43	May cause sensitisation by skin contact.
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.

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.