



METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet DMS-R05

Date of issue: 12/11/2014

Revision date: 05/03/2019

Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Physical state	: Liquid
Substance name	: METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE
Product code	: DMS-R05
Synonyms	: METHACRYLATE FUNCTIONAL SILICONE OIL; POLY(DIMETHYLSILOXANE), METHACRYLOXYPROPYL TERMINATED
Chemical family	: METHACRYLATESILOXANE

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Chemical intermediate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

GELEST, INC.

11 East Steel Road
Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

GELEST INC.

Fritz-Klatte-Strasse 8
65933 Frankfurt

Germany

T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM

info@gelestde.com - www.gelestde.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2

H319

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

: Warning

Hazard statements (CLP) :

: H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

: P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P264 - Wash hands thoroughly after handling.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet

P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

Other hazards not contributing to the classification : Low molecular weight methacrylates have been found to sensitize certain individuals, resulting in severe itching and hives.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Multi-constituent
Name : METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE
CAS-No. : 58130-03-3

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methacryloxypropyl terminated polydimethylsiloxane	(CAS-No.) 58130-03-3	> 95	Eye Irrit. 2, H319
2,6-Di-tert-butyl-p-cresol	(CAS-No.) 128-37-0 (EC-No.) 204-881-4	< 1	Acute Tox. 4 (Oral), H302
Hydroquinone monomethyl ether	(CAS-No.) 150-76-5 (EC-No.) 205-769-8 (EC Index-No.) 604-044-00-7	< 0.05	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1, H317

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of water/....

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

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

Symptoms/effects after inhalation : No information available.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : No information available.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapour and mist.

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store < 5°C.

Incompatible materials : Oxidizing agent.

Storage area : Store in a well-ventilated place. Store away from heat.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydroquinone monomethyl ether (150-76-5)		
Austria	MAK (mg/m ³)	5 mg/m ³
Austria	MAK Short time value (mg/m ³)	10 mg/m ³
Belgium	Limit value (mg/m ³)	5 mg/m ³
France	VME (mg/m ³)	5 mg/m ³
Greece	OEL TWA (mg/m ³)	5 mg/m ³
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
Spain	VLA-ED (mg/m ³)	5 mg/m ³
Denmark	Grænseværdie (langvarig) (mg/m ³)	5 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	5 mg/m ³
Ireland	OEL (15 min ref) (mg/m ³)	15 mg/m ³ (calculated)
Norway	Grænseverdier (AN) (mg/m ³)	5 mg/m ³
Norway	Grænseverdier (Korttidsverdi) (mg/m ³)	5 mg/m ³
Poland	NDS (mg/m ³)	5 mg/m ³
Canada (Quebec)	VEMP (mg/m ³)	5 mg/m ³
Australia	TWA (mg/m ³)	5 mg/m ³
Portugal	OEL TWA (mg/m ³)	5 mg/m ³
2,6-Di-tert-butyl-p-cresol (128-37-0)		
Austria	MAK (mg/m ³)	10 mg/m ³
Belgium	Limit value (mg/m ³)	2 mg/m ³ (aerosol and vapor)
Bulgaria	OEL TWA (mg/m ³)	10 mg/m ³
Bulgaria	OEL STEL (mg/m ³)	50 mg/m ³
France	VME (mg/m ³)	10 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	10 mg/m ³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Greece	OEL TWA (mg/m ³)	10 mg/m ³

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet

2,6-Di-tert-butyl-p-cresol (128-37-0)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (inhalable fraction and vapor)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Switzerland	KZGW (mg/m ³)	40 mg/m ³ (inhalable dust)
Switzerland	MAK (mg/m ³)	10 mg/m ³ (inhalable dust)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	30 mg/m ³ (calculated)
Denmark	Grænseværdie (langvarig) (mg/m ³)	10 mg/m ³
Finland	HTP-arvo (8h) (mg/m ³)	10 mg/m ³
Finland	HTP-arvo (15 min)	20 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³
Ireland	OEL (15 min ref) (mg/m ³)	30 mg/m ³ (calculated)
Canada (Quebec)	VECD (mg/m ³)	10 mg/m ³
Australia	TWA (mg/m ³)	10 mg/m ³
Portugal	OEL TWA (mg/m ³)	2 mg/m ³ (inhalable fraction, aerosol and vapor)
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation.

Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Neoprene or nitrile rubber gloves

Eye protection:

Chemical goggles. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear liquid.
Molecular mass	: 380 - 550 g/mol
Colour	: Pale yellow.
Odour	: No data available
Odour threshold	: No data available
Refractive index	: 1.448
pH	: No data available
Relative evaporation rate (butylacetate=1)	: < 1
Melting point	: < -60 °C
Freezing point	: No data available
Boiling point	: > 205 °C
Flash point	: > 110 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: > 1

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet

Relative density	: 0.97
% Volatiles	: < 5 %
Solubility	: Insoluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 4 - 6 cSt
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Non-hazardous polymerization may occur.

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Organic acid vapors. Silicon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Hydroquinone monomethyl ether (150-76-5)

LD50 oral rat	1600 mg/kg
---------------	------------

2,6-Di-tert-butyl-p-cresol (128-37-0)

LD50 oral rat	890 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	890 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

2,6-Di-tert-butyl-p-cresol (128-37-0)

IARC group	3 - Not classifiable
------------	----------------------

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Low molecular weight methacrylates have been found to sensitize certain individuals, resulting in severe itching and hives.
Symptoms/effects after inhalation	: No information available.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: No information available.
Reason for classification	: Expert judgment

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Hydroquinone monomethyl ether (150-76-5)

LC50 fish 1 84.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

LC50 fish 2 28.5 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Hydroquinone monomethyl ether (150-76-5)

Log Pow 1.34

2,6-Di-tert-butyl-p-cresol (128-37-0)

BCF fish 1 230 - 2500

Log Pow 4.17

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Incinerate. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not applicable

UN-No. (IMDG) : Not applicable

UN-No. (IATA) : Not applicable

UN-No. (ADN) : Not applicable

UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable

Proper Shipping Name (IMDG) : Not applicable

Proper Shipping Name (IATA) : Not applicable

Proper Shipping Name (ADN) : Not applicable

Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE is not on the REACH Candidate List

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE is not on the REACH Annex XIV List

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

% Volatiles : < 5 %

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

METHACRYLOXYPROPYL TERMINATED POLYDIMETHYLSILOXANE

Safety Data Sheet

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

SDS EU (REACH Annex II) - Custom

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

© 2019 Gelest Inc. Morrisville, PA 19067

The logo for Gelest, featuring the word "Gelest" in a large, light blue, serif font. The letters are partially overlaid by a large, light blue triangle pointing to the right, which is positioned behind the text.