



MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet MFS-M15

Issue date: 12/15/2014
2.0

Revision date: 04/01/2024

Supersedes version of: 03/05/2019

Version:

SECTION 1: Identification

1.1. Identification

| | |
|-----------------|--|
| Product name | : MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric |
| Product code | : MFS-M15 |
| Product form | : Substance |
| Physical state | : Liquid |
| Synonyms | : METHACRYLATE FUNCTIONAL SILICONE OIL; POLY(3,3,3- TRIFLUOROPROPYLMETHYLSILOXANE), MONOMETHACRYLOXYPROPYL, BUTYL TERMINATED |
| Chemical family | : METHACRYLATESILOXANE |

1.2. Recommended use and restrictions on use

| | |
|-----------------|-------------------------|
| Recommended use | : Chemical intermediate |
|-----------------|-------------------------|

1.3. Supplier

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

1.4. Emergency telephone number

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

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

| | | |
|--|------|---|
| Serious eye damage/eye irritation Category 2A | H319 | Causes serious eye irritation |
| Hazardous to the aquatic environment – Acute | H402 | Harmful to aquatic life |
| Hazard Category 3 | | |
| Hazardous to the aquatic environment – Chronic | H412 | Harmful to aquatic life with long lasting effects |
| Hazard Category 3 | | |
| Full text of H statements : see section 16 | | |

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: H319 - Causes serious eye irritation
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS US)
: P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Hazards not otherwise classified (HNOC)

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Multi-constituent
Name : MONOMETHACRYLOXYPROPYL TERMINATED
POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric
CAS-No. : 1072456-00-8

| Name | Product identifier | % | GHS US classification |
|---|-----------------------|----------|---|
| Monomethacryloxypropyl terminated polytrifluoropropylmethylsiloxane | CAS-No.: 1072456-00-8 | 95 – 100 | Eye Irrit. 2A, H319 |
| 2,6-Di-tert-butyl-p-cresol | CAS-No.: 128-37-0 | 0 – 1 | Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Full text of hazard classes and 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 victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of soap and water. Get medical advice/attention.

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 (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 : May be harmful if swallowed.

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.
Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

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

5.3. Special protective equipment and precautions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal 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

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
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 vapor and mist. Use only in well ventilated areas.
Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

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. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

USA - ACGIH - Occupational Exposure Limits

| | |
|-------------------------|---|
| Local name | Butylated hydroxytoluene |
| ACGIH OEL TWA | 2 mg/m ³ (IFV - Inhalable fraction and vapor) |
| Remark (ACGIH) | TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen) |
| ACGIH chemical category | Not Classifiable as a Human Carcinogen |
| Regulatory reference | ACGIH 2023 |

USA - NIOSH - Occupational Exposure Limits

| | |
|-----------------|----------------------|
| NIOSH REL (TWA) | 10 mg/m ³ |
|-----------------|----------------------|

8.2. Appropriate engineering controls

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Provide local exhaust or general room ventilation. |
|----------------------------------|--|

8.3. Individual protection measures/Personal protective equipment

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 | : 800 – 1000 g/mol |
| Color | : Deep. Straw. |
| Odor | : No data available |
| Odor threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Melting point | : < -60 °C |
| Freezing point | : No data available |

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

| | |
|---|-----------------------|
| Boiling point | : > 205 °C |
| Flash point | : 205 °C |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapor pressure | : No data available |
| Relative vapor density at 20°C | : No data available |
| Relative density | : 1.09 |
| Solubility | : Insoluble in water. |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Partition coefficient n-octanol/water (Log Kow) | : No data available |
| Viscosity, kinematic | : 40 – 60 cSt |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Explosion 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 (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

| 2,6-Di-tert-butyl-p-cresol (128-37-0) | |
|---------------------------------------|---------------------------|
| LD50 oral rat | 890 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg Source: ECHA |

| | |
|---------------------------|------------------|
| Skin corrosion/irritation | : Not classified |
|---------------------------|------------------|

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

| | |
|-----------------------------------|----------------------------------|
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |

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

| | |
|--|--|
| NOAEL (chronic,oral,animal/male,2 years) | 25 mg/kg body weight Animal: rat, Animal sex: male |
| IARC group | 3 - Not classifiable |

| | |
|-------------------------------------|----------------------------------|
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| 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 | : May be harmful if swallowed. |
| Reason for classification | : Expert judgment |

SECTION 12: Ecological information

12.1. Toxicity

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

| | |
|----------------------|---|
| LC50 - Fish [1] | > 0.57 mg/l Source: EHCA |
| EC50 - Crustacea [1] | 0.48 mg/l Source: ECHA |
| EC50 72h - Algae [1] | 6 mg/l (Species: Pseudokirchneriella subcapitata) |
| EC50 72h - Algae [2] | > 0.42 mg/l (Species: Desmodesmus subspicatus) |
| LOEC (chronic) | 1 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 0.023 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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

| | |
|---|------------|
| BCF - Fish [1] | 230 – 2500 |
| Partition coefficient n-octanol/water (Log Pow) | 4.17 |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the ozone layer : No additional information available

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Incinerate. Dispose in a safe manner in accordance with local/national regulations.
Ecological information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

| DOT | TDG | IMDG | IATA |
|--|-----------------------------------|---|-----------------------------------|
| 14.1. UN number | | | |
| Not regulated for transport | | | |
| 14.2. Proper Shipping Name | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| Transport document description | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | |
| Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available | | | |

14.6. Special precautions for user

DOT
No data available

TDG
No data available

IMDG
No data available

IATA
No data available

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

Not applicable

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

SECTION 15: Regulatory information

15.1. US Federal regulations

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric (1072456-00-8)

TSCA Exemption/Exclusion

CAUTION: This material is supplied for research and development purposes subject to the RD exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States.

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Monomethacryloxypropyl terminated
polytrifluoropropylmethylsiloxane

CAS-No. 1072456-00-8

95 – 100%

15.2. International regulations

CANADA

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

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

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

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

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

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)
Listed on Thailand Existing Chemicals Inventory (DIW)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

MONOMETHACRYLOXYPROPYL TERMINATED POLYTRIFLUOROPROPYLMETHYLSILOXANE, symmetric

Safety Data Sheet

SECTION 16: Other information

Full text of H-phrases::

| | |
|------|--|
| H302 | Harmful if swallowed |
| H319 | Causes serious eye irritation |
| H400 | Very toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| H412 | Harmful to aquatic life with long lasting effects |

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.

Hazard Rating :
Health : 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Prepared by safety and environmental affairs.

Issue date: 12/15/2014 Revision date: 04/01/2024 Supersedes version of: 03/05/2019 Version: 2.0

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.

© 2023 Gelest Inc. Morrisville, PA 19067