

Safety Data Sheet XMS-5025.2

Date of issue: 01/13/2015 Revision date: 07/25/2016 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product name : (10-20% METHOXYMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER, 20-25% in

isopropanol

Product code : XMS-5025.2
Product form : Mixture
Physical state : Liquid

Synonyms : SILOXANES, DiMe, w/METHYLSILSEQUIOXANE-METHOXY terminated

Chemical family : ORGANOSILOXANE

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

Flammable liquids Category 2

Serious eye damage/eye irritation Category 2A

Specific target organ toxicity (single exposure) Category 3

Full text of H statements : see section 16

H225 Highly flammable liquid and vapor H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

Precautionary statements (GHS US) : P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P261 - Avoid breathing vapors.

P264 - Wash hands thoroughly after handling.

P312 - Call a doctor if you feel unwell

P210 - Keep away from heat, open flames, sparks. - No smoking.

P240 - Ground/Bond container and receiving equipment

P241 - Use explosion-proof electrical equipment

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P271 - Use only outdoors or in a well-ventilated area.

 ${\it P303+P361+P353-If\ on\ skin\ (or\ hair):\ take\ off\ immediately\ all\ contaminated\ clothing.\ rinse}$

skin with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing 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.

P370+P378 - In case of fire: Use water spray or fog, foam, carbon dioxide, dry chemical to

extinguish.

P403+P235 - Keep in a cool place

P405 - Store locked up.

P501 - Dispose of contents/container to licensed waste disposal facility.

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P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

Hazards not otherwise classified (HNOC)

Other hazards not contributing to the classification

: This material slowly generates methanol on contact with water and moisture in living tissues.

Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

Substances

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	GHS-US classification
Isopropanol	(CAS-No.) 67-63-0	75 - 80	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 STOT SE 3, H336
Methoxymethylsiloxane-dimethylsiloxane copolymer	(CAS-No.) 68440-84-6	20 - 25	Eye Irrit. 2A, H319

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

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 : May cause drowsiness or dizziness.

Symptoms/effects after skin contact

Causes skin irritation. : Causes serious eye irritation.

Symptoms/effects after eye contact Symptoms/effects after ingestion

: May be harmful if swallowed.

Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

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

Unsuitable extinguishing media : Do not use straight streams.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. Irritating fumes and organic acid vapors may develop when Fire hazard

material is exposed to elevated temperatures or open flame.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Special protective equipment and precautions for fire-fighters

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

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

Personal precautions, protective equipment and emergency procedures

General measures : Eliminate every possible source of ignition. Use special care to avoid static electric charges.

For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

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6.1.2. For emergency responders

Protective equipment

: Equip cleanup crew with proper protection. Do not attempt to take action without suitable protective equipment. 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. Use only non-sparking tools.

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

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Precautions for safe handling

: Avoid all eye and skin contact and do not breathe vapor and mist. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area. Use only non-sparking tools.

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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical equipment.

Storage conditions

: Keep container tightly closed. Keep in a cool place.

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

Isopropanol (67-63-0)			
ACGIH	ACGIH TWA (ppm)		200 ppm
ACGIH	ACGIH STEL (ppm)		400 ppm
OSHA	OSHA PEL (TWA) (mg/m³)		980 mg/m³
OSHA	OSHA PEL (TWA) (ppm)		400 ppm
IDLH	US IDLH (ppm)		2000 ppm (10% LEL)
NIOSH	NIOSH REL (TWA) (mg/m³)		980 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)		400 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)		1225 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)		500 ppm

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

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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. Slightly viscous.

Color : No data available
Odor : No data available
Odor threshold : No data available
Refractive index : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available

Melting point : < -40 °C

Freezing point : No data available

Boiling point : > 205 °C Flash point : 12 °C

Auto-ignition temperature : 425 (isopropanol)

Decomposition temperature : No data available

Flammability (solid, gas) : Highly flammable liquid and vapor

Vapor pressure : No data available Relative vapor density at 20 °C : No data available

Relative density : 0.83
% Volatiles : > 80 °C
Solubility : Insoluble in water.
Log Pow : No data available

Log Kow : No data available Viscosity, kinematic : 2 - 5 cSt

Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available

Explosion limits : 2.5 - 12 vol % (lower; upper: isopropanol)

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 in sealed containers.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Formaldehyde. Isopropanol. Methanol. Organic acid vapors. Silicon dioxide.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Isopropanol (67-63-0)		
LD50 oral rat	1870 mg/kg	
LD50 dermal rabbit	4059 mg/kg	
LC50 inhalation rat (mg/l)	72600 mg/m³ (Exposure time: 4 h)	
ATE US (oral)	1870 mg/kg body weight	
ATE US (dermal)	4059 mg/kg body weight	

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Isopropanol ((67-63-0)
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IARC group 3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

Specific target organ toxicity - repeated

exposure

: Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Isopropanol (67-63-0)LC50 fish 19640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])		
LC50 fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Isopropanol (67-63-0)	
Log Pow	0.05 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the ozone layer : No additional information available

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. Dispose of

contents/container to licensed waste disposal facility.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

14.1. UN number

UN-No.(DOT) : 1993 DOT NA no. UN1993

14.2. UN proper shipping name

Transport document description : UN1993 Flammable liquids, n.o.s. ((10-20% METHOXYMETHYLSILOXANE)-

DIMETHYLSILOXANE COPOLYMER, 25% in isopropanol), 3, II

Proper Shipping Name (DOT) : Flammable liquids, n.o.s.

((10-20% METHOXYMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER, 25% in

isopropanol)

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Symbols : G - Identifies PSN requiring a technical name

14.3. Additional information

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations

Methoxymethylsiloxane-dimethylsiloxane copolymer (68440-84-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Isopropanol (67-63-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.

SARA Section 313 - Emission Reporting 1 % (only if manufactured by the strong acid process, no supplier notification)

15.2. International regulations

CANADA

Methoxymethylsiloxane-dimethylsiloxane copolymer (68440-84-6)

Listed on the Canadian DSL (Domestic Substances List)

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Isopropanol (67-63-0)		
Listed on the Canadian DSL (Domestic Substances List)		
WHMIS Classification Class B Division 2 - Flammable Liquid		
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects	

EU-Regulations

No additional information available

Isopropanol (67-63-0)

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

National regulations

Methoxymethylsiloxane-dimethylsiloxane copolymer (68440-84-6)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Isopropanol (67-63-0)

Listed on the AICS (Australian Inventory of Chemical Substances)

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 the Japanese ISHL (Industrial Safety and Health Law)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Canadian IDL (Ingredient Disclosure List)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on CICR (Turkish Inventory and Control of Chemicals)

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

Isopropanol (67-63-0)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases::

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H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

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.: Chemcial 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

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

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.

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Safety Data Sheet

Prepared by safety and environmental affairs.

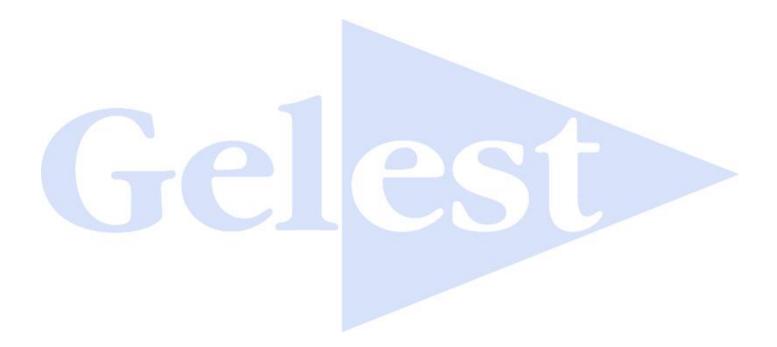
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SDS US (GHS HazCom 2012) - Custom

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

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