MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

TRADE NAME (as labeled): DMDO-LO

TRIETHYLENEGLYCOL DIMERCAPTANE

MANUFACTURER'S NAME: Manufactured by ICA, Ingenieria y Ciencias Aplicadas, S.A. de C.V. Address (mailing address): Av. Industria Automotriz 3045, Parque Industrial Ramos Arizpe.

Ramos Arizpe Coahuila, C.P. 25900. Mexico

Emergency phone: ONLY IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A

SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT YOU CAN CALL

CHEMTREC 1-800-424-9300

Date prepared or revised: 04/26/16 Name of preparer: MLM

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Color: Colorless
Physical state: liquid
Odor: mercaptans

WARNING!

HARMFUL IF INHALED.

MAY BE HARMFUL IF SWALLOWED.

OBJECTIONABLE ODOR MAY CAUSE NAUSEA, HEADACHE OR DIZZINESS.

Potential Health Effects

Primary routes of exposure:

Inhalation and skin contact.

Signs and symptoms of acute exposure:

Objectionable odor may cause nausea, headache or dizziness.

Skin:

Non-irritating. (based on animal studies)

Inhalation:

Toxic (based on animal studies)

Eyes:

Slightly irritating. (based on animal studies)

Ingestion:

Slightly toxic. (based on animal studies)

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411

GHS Label elements, including precautionary statements

Pictogram

Signal word Warning

Hazard statement(s)

H302 + H332 Harmful if swallowed or if inhaled

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P273 Avoid release to the environment.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P330 Rinse mouth. P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS Stench.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number: 14970-87-7

Other chemical names: TRIGLYCOL DIMERCAPTANE or 1,8-DIMERCAPTO-3,6-DIOXAOCTANE

Molecular Formula: C₆H₁₄O₂S₂

Structure: HS-CH₂CH₂-O-CH₂CH₂-O-CH₂CH₂-SH

Assay: 98% min. EINECS No.: 2390442

SECTION 4. FIRST AID MEASURES

In case of skin contact, immediately wash skin with soap and copious amounts of water for at least 15 minutes.

If inhaled, remove to fresh air. If not breathing give artificial respiration mouth to mouth. If breathing is difficult, give oxygen.

In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

If ingested, give water, do not induce vomiting. Never give liquids to an unconscious person.

Call a physician in all cases.

Discard contaminated clothing and shoes.

SECTION 5. FIRE FIGHTING MEASURES

FIRE EXTINGUISHING MATERIALS:

Water spray, carbon dioxide, or appropriate foam.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Emits toxic fumes of carbon dioxide, carbon monoxide and various oxides of sulfur. Container explosion may occur under fire conditions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Evacuate area.

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

If material can be contained as a liquid it may be neutralized with soda ash. Soda ash is itself a caustic irritant.

Otherwise spread absorbent material over liquid and mix until it appears dry. Shovel mixture into open top drum. Place lid on and close.

Avoid raising dust while sweeping.

Small spills can be deodorized with diluted bleach. Caution, this is an exothermic reaction.

Ventilate area and wash spill site after material pickup is complete.

Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

SECTION 7. HANDLING AND STORAGE

Wear appropriate NIOSH/MSHA approved respirator, chemical resistant gloves, safety goggles, other protective clothing.

Use only in a chemical fume hood.

Avoid contact with eyes, skin, clothing.

Avoid prolonged or repeated exposure.

Open carefully. May develop pressure.

Keep tightly closed.

Store in dry area.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Wear appropriate NIOSH/MSHA approved respirator, chemical resistant gloves, safety goggles, other protective clothing.

Safety shower and eye bath.

Use only in a chemical fume hood.

Do not breathe vapor.

Avoid contact with eyes, skin, clothing.

Wash thoroughly after handling. If skin is not very sensitive, wash hands with very diluted bleach to remove residual skin odor.

Avoid prolonged or repeated exposure.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor: Clear, colorless to light yellow liquid.

Boiling point or range: 225°C (437°F)

Flash point: 100°C (212 °F)

Specific gravity: 1.12 kg/m3 (77 F° or 25°C)

Vapor pressure: 0.000 mmHg (68°F (20°C))/0.4mmHg (187 °F (86° C))/5.0mmHg(257-268°F (125-131°C)

Formula weight: 182.29 g/mol

Solubility in water: 2%. 15-20g/l 20°C (68°F)

Relative index: 1.509

SECTION 10. STABILITY AND REACTIVITY

This material is chemically Stable under normal and anticipated storage, handling and processing conditions.

INCOMPATIBILITY (MATERIALS TO AVOID):

Strong oxidizing agents, strong bases. Mineral acids and caustic sosa

HAZARDOUS DECOMPOSITION PRODUCTS:

Toxic fumes of carbon monoxide, carbon dioxide, sulfur oxides, and hydrogen sulfide gas.

SECTION 11. TOXICOLOGICAL INFORMATION

May be fatal if swallowed. Causes eye irritation. May cause skin irritation. Exposure can cause: nausea, headache and vomiting. Possible carcinogen.

EINECS No.: 2390442 ECS No. Japan: 2-2451

ORL-RAT: LD₅₀ 835 mg/kg (OECD Guideline No. 405)

IHL-RAT: LC₅₀ 1.34 mg/L 4 hours mist (OECD Guideline No. 404)

Chronic effects: not established

Additional Information: Redness to eyes, non-irritating to skin-rabbits.

SECTION 12. ECOLOGICAL INFORMATION

Environmentally hazardous material. Follow national and local guidelines.

SECTION 13. DISPOSAL CONSIDERATIONS

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

NOTE: Dispose of all wastes in accordance with national and local environmental regulations.

SECTION 14. TRANSPORT INFORMATION

Toxic liquid, organic, n.o.s., (1,8 DIMERCAPTO-3,6-DIOXAOCTANE)

UN2810, Class 6.1, Packaging Group III.

Package presentation:

55 Gallon Plastic Drum, UN1H1/Y1.9/175/12

200 Kgs Net per drum.

SECTION 15. REGULATORY INFORMATION

TSCA listed

SECTION 16. OTHER INFORMATION

Acute Tox. Acute toxicity
Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
H302 Harmful if swallowed.
H302 + H332 Harmful if swallowed or if inhaled

H332 Harmful if inhaled.

HMIS Rating

Health hazard: 2

Chronic Health Hazard:

Flammability: 1 Physical Hazard 0

NFPA Rating

Health hazard: 2 Fire Hazard: 1 Reactivity Hazard: 0

The above information is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. ICA shall not be held liable for any damage resulting from handling or from contact with the above product.