1 PRODUCT AND COMPANY IDENTIFICATION

Thio and Fine Chemicals
Arkema Inc.
2000 Market Street
Philadelphia, PA 19103

EMERGENCY PHONE NUMBERS:
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service	1-800-628-4453	8:30 to 5:30 EST

Product Name	1,8-DIMERCAPTO-3,6-DIOXAOCTANE (DMDO)
Product Synonym(s)	
Chemical Family	
Chemical Formula	
Chemical Name	1,8-DIMERCAPTO-3,6-DIOXAOCTANE (DMDO)
EPA Reg Num	
Product Use	MODIFIER (POLYMERS, RESINS)

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
1,8-Dimercapto-3,6-dioxaoctane	14970-87-7	100%	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

The components of this product are all on the TSCA Inventory list.

3 HAZARDS IDENTIFICATION

Emergency Overview
Slightly yellow liquid with bad odor.
CAUTION!
MAY CAUSE EYE IRRITATION.
MAY BE HARMFUL IF SWALLOWED.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on single exposure animal tests, it is considered to be slightly toxic if swallowed or inhaled, slightly irritating to eyes and non-irritating to skin.

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water. Get medical attention if irritation persists.

4 FIRST AID MEASURES

IF ON SKIN, immediately flush with plenty of water. Get medical attention if irritation persists.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature		
Flash Point	129 C Closed Cup	Flash Point Method
Flammable Limits- Upper		
Lower		

Extinguishing Media

Use dry powder.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

When burned, the following hazardous products of combustion can occur:
Hydrogen sulfide
Sulfur oxides
Oxides of carbon

6 ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Contain spill. Stop leak at source if this can be done safely. Ventilate area. Nonessential personnel should leave the area until cleanup is completed. Pump liquid into DOT-approved drums for disposal. Absorb remaining liquid onto inert absorbent and place in DOT approved drums for disposal. Wash area with water. Keep concentrate and wash water from entering sewers or waterways. 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.

7 HANDLING AND STORAGE

Handling

Do not taste or swallow. Do not get in eyes, on skin or clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage

This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposures. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment available.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing promptly and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash skin thoroughly after handling.

Respiratory Protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

The components of this product have no established Airborne Exposure Guidelines

-Only those components with exposure limits are printed in this section.
-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Slightly yellow liquid with bad odor.
pH	NE
Specific Gravity	1.140 @ 25C
Vapor Pressure	0.00032 hPa (mbar) @ 20C
Vapor Density	1140 kg/m3 @ 25C
Melting Point	NA
Freezing Point	NE
Boiling Point	225 C
Solubility In Water	1.5 -2 % @ 20C
Molecular Weight	182.30
Other Physical Data	Practically not bioaccumulable: log Pow = 0.66 (calculated)

10 STABILITY AND REACTIVITY

Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

Incompatibility

Caustic soda, Mineral acids

Hazardous Decomposition Products

Thermal decomposition giving flammable and toxic products:
Hydrogen sulfide, Oxides of sulfur, Carbon oxides

11 TOXICOLOGICAL INFORMATION

Toxicological Information

Data on this material and/or its components are summarized below. Single exposure (acute) studies indicate:
Oral - Slightly Toxic to Rats (LD50 835 mg/kg)
Inhalation - Slightly Toxic to Rats (4-hr LC50 1.34 mg/l)
Eye Irritation - Slightly Irritating to Rabbits
Skin Irritation - Non-irritating to Rabbits No skin allergy was observed in guinea pigs following repeated exposure. No genetic changes were observed in tests using bacteria.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information

Data on this material and/or its components are summarized below.

This material is moderately toxic to Daphnia magna (48-hr EC50 1.7 mg/l).

Chemical Fate Information

Data on this material and/or its components are summarized below.

This material is not readily biodegradable (<10% after 28-days).

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Incineration is the recommended method for disposal observing all local, state and federal regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14 TRANSPORT INFORMATION

DOT Name	Non Regulated by DOT
DOT Technical Name	
DOT Hazard Class	
UN Number	
DOT Packing Group	PG
RQ	
DOT Special Information	RID/ADR (Europe): Environmentally hazardous substance, liquid, n.o.s. (1,8-Dimercapto-3,6-Dioxaoctane) Class 9 UN 3082 PG III

15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	N
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

The components of this product are all on the TSCA Inventory list.

Ingredient Related Regulatory Information:

SARA Reportable Quantities	CERCLA RQ	SARA TPQ
1,8-Dimercapto-3,6-dioxaoctane	NE	NE

16 OTHER INFORMATION

Revision Information

Revision Date	25 JUL 2006	Revision Number 4
Supercedes Revision Dated	11-OCT-2004	

Revision Summary

Reviewed and revised all sections.

Key

NE= Not Established NA= Not Applicable (R) = Registered Trademark

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