



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION:

**PRODUCT CODE** H0144  
**PRODUCT NAME** 1,3-PROPANEDITHIOL  
**SUPPLIER** Shanghai M & U International Trade Co., Ltd.  
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200333 Shanghai, China  
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**FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)**

### 2. HAZARD IDENTIFICATION:

SEE BELOW

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS:

SYNONYM	propane-1,3-dithiol
Molecular Formula	C3 H8 S2
Molecular Weight	108.23
CAS-No	EC-No
109-80-8	203-706-9

### 4. FIRST-AID GUIDE:

#### Eyes

IMMEDIATELY FLUSH EYES WITH LARGE QUANTITIES OF COLD CLEAN WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN IMMEDIATELY

#### Skin

WASH WITH SOAP AND WATER. FLUSH WITH LARGE QUANTITIES OF WATER. IF IRRITATION PERSISTS CALL A PHYSICIAN

#### Inhalation

REMOVE TO FRESH AIR AND CALL A PHYSICIAN IF NECESSARY

#### Ingestion

ADMINISTER WATER OR MILK TO DILUTE. CONTACT A PHYSICIAN OR LOCAL POISON CONTROL CENTER IMMEDIATELY. **DO NOT** INDUCE VOMITING

## 5. FIRE-FIGHTING GUIDE:

<b>Flash Point (°F)</b>	142	<b>Method Used</b>	CC
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### **Extinguishing Media**

Carbon Dioxide; Dry Chemical; Universal Type Foam

### **Special Fire Fighting Procedures**

Evacuate unprotected and untrained personnel. Trained firefighting personnel should be equipped with self-contained breathing apparatus and full protective gear

### **Unusual Fire, Explosion and Stability Hazards**

SEALED CONTAINERS MAY BUILD UP PRESSURE AT HIGH TEMPERATURES. IF POSSIBLE, KEEP CONTAINERS COOL WITH WATER SPRAY. CARBON DIOXIDE AND CARBON MONOXIDE PRODUCED UPON COMBUSTION

## 6. ACCIDENTAL RELEASE GUIDE:

REMOVE ANY SOURCES OF FLAME OR SPARKS. IF IN A CONFINED AREA NIOSH APPROVED RESPIRATORY PROTECTION MAY BE REQUIRED. ABSORB SPILLS ON VERMICULITE OR OTHER SUITABLE ABSORBENT MATERIAL AND REMOVE TO AN APPROVED DISPOSAL CONTAINER

## 7. HANDLING AND STORAGE:

IT IS RECOMMENDED THAT THIS MATERIAL BE STORED IN TIGHT FULL CONTAINERS IN A COOL, DRY PLACE AWAY FROM LIGHT

## 8. EXPOSURE AND PERSONAL PROTECTION:

### **Eyes**

IN GENERAL, THE USE OF SAFETY GLASSES IS RECOMMENDED. IF THE MATERIAL IS TO BE HANDLED IN A MANNER WHERE SPLASHING MAY OCCUR, THE USE OF SPLASH GOGGLES OR FACE SHIELD IS RECOMMEND

### **Respiratory**

IN WELL VENTILATED AREAS RESPIRATORY PROTECTION IS NOT NORMALLY REQUIRED. IN CONFINED, POORLY VENTILATED AREAS THE USE OF NIOSH-APPROVED RESPIRATORY PROTECTION MAYBE REQUIRED OR IF MATERIAL IS RATED TOXIC BY INHALATION

### **Equipment and Apparel**

THE USE OF CHEMICAL RESISTANT GLOVES IS RECOMMENDED. ACCEPTABLE INDUSTRIAL HYGIENE PRACTICES SHOULD BE MAINTAINED. LIMIT EXPOSURE TO PRODUCT WHENEVER POSSIBLE; WASH AFTER ANY CONTACT. THOROUGHLY WASH ANY CONTAMINATED CLOTHING OR SHOES.

**Ventilation**

VENTILATION MEETING ACGIH STANDARDS SHOULD BE EMPLOYED

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

Physical State	LIQUID
% Volatile	N/A
Odor	CHARACTERISTIC
Melting Point (°C)	-79
Color	COLORLESS TO PALE YELLOW
Vapor Density (Air = 1)	>1
Solubility in Water	INSOLUBLE
Refractive Index @ 20C	1.540
Boiling Point (oC)	169
Water Content	N/A
Vapor Pressure (mm Hg @ 20oC)	5.0
Alcohol Content	N/A
Specific Gravity @ 25C (H2O=1.0)	1.078

**10. STABILITY AND REACTIVITY:**

This material presents no significant hazard. Hazardous Polymerization will not occur and it will not react violently with water

Contact with highly reactive chemical oxidants should be avoided. If burned this product will produce carbon monoxide and/or carbon dioxide

**11. DISPOSAL RECOMMENDATIONS:**

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS

**12. TRANSPORTATION INFORMATION:****DOT (US)**

UN number: 3334 Class: 9

Proper shipping name: Aviation regulated liquid, n.o.s. (Propane-1,3-dithiol)

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

Not dangerous goods

**IATA**

UN number: 3334 Class: 9 Packing group: III

Proper shipping name: Aviation regulated liquid, n.o.s. (Propane-1,3-dithiol)

### 13. REGULATORY INFORMATION:

#### **Carcinogenicity**

NTP	NO
OSHA	NO
IARC MONOGRAPH	NO
OSHA PEL	NOT ESTABLISHED
ACGIH TLV	NOT ESTABLISHED

#### **Acute Toxicity Data**

ORAL LD50	NOT ESTABLISHED
DERMAL LD50	NOT ESTABLISHED
INHALATION LC50	NOT ESTABLISHED

#### **Health Hazards (Acute and Chronic)**

Skin Contact	MAY CAUSE IRRITATION
Inhalation	NOT ESTABLISHED
Eye Contact	MAY CAUSE IRRITATION
Ingestion	NOT ESTABLISHED

#### **Other Effects**

The health hazard information is based on laboratory animal test data for the individual components of this product in their pure form as provided under 29 CFR 1910.1200 (d)(5)(ii). The user should consider the relevancy of this information in a manner consistent with its particular purpose

#### **US FEDERAL**

HMIS III: PHYSICAL HAZARD: 1

HEALTH: 1 FLAMMABILITY: 2 REACTIVITY: 0 PERSONAL PROTECTION: X

#### **TSCA**

CAS# 109-80-8 IS LISTED ON THE TSCA INVENTORY

#### **HEALTH & SAFETY REPORTING LIST**

NONE OF THE CHEMICALS ARE ON THE HEALTH & SAFETY REPORTING LIST

#### **CHEMICAL TEST RULES**

NONE OF THE CHEMICALS IN THIS PRODUCT ARE UNDER A CHEMICAL TEST RULE

#### **SECTION 12B**

NONE OF THE CHEMICALS ARE LISTED UNDER TSCA SECTION 12B

#### **TSCA SIGNIFICANT NEW USE RULE**

NONE OF THE CHEMICALS IN THIS MATERIAL HAVE A SNUR UNDER TSCA

**CERCLA HAZARDOUS SUBSTANCES AND CORRESPONDING RQS**  
NONE OF THE CHEMICALS IN THIS MATERIAL HAVE AN RQ

**SARA SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES**  
NONE OF THE CHEMICALS IN THIS PRODUCT HAVE A TPQ

**SECTION 313**  
NO CHEMICALS ARE REPORTABLE UNDER SECTION 313

**CLEAN AIR ACT:**  
THIS MATERIAL DOES NOT CONTAIN ANY HAZARDOUS AIR POLLUTANTS  
THIS MATERIAL DOES NOT CONTAIN ANY CLASS 1 OZONE DEPLETORS  
THIS MATERIAL DOES NOT CONTAIN ANY CLASS 2 OZONE DEPLETORS

**CLEAN WATER ACT**  
NONE OF THE CHEMICALS IN THIS PRODUCT ARE LISTED AS HAZARDOUS  
SUBSTANCES UNDER THE CWA  
NONE OF THE CHEMICALS IN THIS PRODUCT ARE LISTED AS PRIORITY  
POLLUTANTS UNDER THE CWA  
NONE OF THE CHEMICALS IN THIS PRODUCT ARE LISTED AS TOXIC POLLUTANTS  
UNDER THE CWA

**OSHA**  
NONE OF THE CHEMICALS IN THIS PRODUCT ARE CONSIDERED HIGHLY  
HAZARDOUS BY OSHA

**STATE**  
CAS# 109-80-8 IS NOT PRESENT ON STATE LISTS FROM CA, PA, MN, MA, FL, OR NJ

**CALIFORNIA PROP 65**  
CALIFORNIA NO SIGNIFICANT RISK LEVEL: NONE OF THE CHEMICALS IN THIS  
PRODUCT ARE LISTED

**EUROPEAN/INTERNATIONAL REGULATIONS**

**EUROPEAN LABELING IN ACCORDANCE WITH EC DIRECTIVES**

**HAZARD SYMBOLS**  
NOT AVAILABLE

**RISK PHRASES**  
R 36/38                      IRRITATING TO SKIN AND EYES

**SAFETY PHRASES**  
S 7/8                      KEEP CONTAINER TIGHTLY CLOSED AND DRY

S16 KEEP AWAY FROM SOURCES OF IGNITION – NO SMOKING  
S 24/25 AVOID CONTACT WITH SKIN AND EYES.  
S 37 WEAR SUITABLE GLOVES  
S 39 WEAR EYE/FACE PROTECTION

**WGK (WATER DANGER/PROTECTION)**

CAS# 109-80-8

**CANADA - DSL/NDSL**

CAS# 109-80-8

**CANADA - WHMIS**

WHMIS: NOT AVAILABLE

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS AND THE MSDS CONTAINS ALL OF THE INFORMATION REQUIRED BY THOSE REGULATIONS

**14. OTHER INFORMATION:**

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.