

# MATERIAL SAFETY DATA SHEET

## Dimethylthio Toluenediamin

Section I. Chemical Product and Company Identification	
<p><b>Product Name:</b> Ethacure 300 (DMTDA)  <b>CAS No:</b> 106264-79-3  <b>Synonym :</b> DMTDA, Dimethylthio Toluene Diamine, ETHACURE 300 curative , ETHACURE</p> <p><b>Chemical Name:</b> Dimethylthio Toluenediamine  <b>Warning Statement:</b> Do not swallow. Avoid skin contact. Skin contact may cause allergic reaction. Avoid release into the aquatic environment.</p>	<p><b>Contact Information:</b>            XiLan Chemical Co. Ltd.,            38, Zheda Road, Hangzhou,            Zhejiang,            China            International Sales: +8613646811141            Order Online: <a href="http://XilanChem.com">XilanChem.com</a>            24HR Emergency Telephone : <b>+61 2 9666 3788</b>            For non-emergency assistance: <b>+8613646811141</b></p>

II. HAZARDS IDENTIFICATION
<p><b>Emergency Overview</b>            Harmful if swallowed.            May cause sensitisation by skin contact.            Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.</p> <p><b>Potential Health Effects</b></p> <p><b>Eye Contact</b>            Short Term Effects: Irritation            Long Term Effects: No information is available</p> <p><b>Skin Contact</b>            Short Term Effects: Irritation.            Long Term Effects: May cause sensitization</p> <p><b>Ingestion</b>            Short Term Effects: No information on significant adverse effects.            Long Term Effects: Diarrhea.</p> <p><b>Inhalation</b>            Short Term Effects: Mechanical Irritation, chest pain            Long Term Effects: No information is available.</p>

III. FIRST AID	
<b>EYES:</b>	If material is splashed into eyes, immediately flush with plenty of water for 15 minutes, ensuring eyelids are held open. If irritation persists seek medical attention
<b>SKIN:</b>	If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with warm water and soap. Flush skin with water. Seek medical

attention if irritation develops or persists.

**INGESTION:** First Aid Details Not available. **Seek medical attention quickly.**

**INHALATION:** Remove victim to fresh air. Apply resuscitation if victim is not breathing. If trained personnel available administer oxygen if breathing is difficult. Seek medical attention.

**Swallowed :** If swallowed, induce vomiting immediately by giving two glasses of water to drink and sticking finger down throat. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

#### IV. FIRE FIGHTING MEASURES

**Fire and Explosion Hazard:**

If safe to do so, move undamaged containers from fire area.

**Extinguishing:** Use extinguishing media suitable for surrounding fire situation. Use foam, water spray (fog), CO<sub>2</sub> or dry powder. Use water spray to cool fire-exposed containers and for large fires.

**Firefighting:** Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended to prevent contact with skin and eyes.

**Flammability:** Combustible liquid - Store in accordance with AS1940 – The storage and handling of flammable and combustible liquids.

#### IV. ACCIDENTAL RELEASE MEASURES

Do not allow into drains or waterways. Do not allow to contaminate soil. Contain spill with dikes or absorbents to prevent entry into drains, sewers or waterways. Take up mechanically or with absorbent material. Large spills may be taken up with pump or vacuum and finished off with dry chemical absorbent. May require excavation of contaminated soil. Dispose of empty containers in accordance with federal, state and local laws.

#### V. HANDLING AND STORAGE

Wear gloves, long-sleeved shirt, and eye protection. Do not eat, drink or smoke in the workplace. Keep containers tightly closed and store in a cool, dry, well-ventilated area. Protect from moisture. Purge with nitrogen and close container when not in use.

#### VI. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:** No occupational exposure limits established.

**DI-(METHYLTHIO)TOLUENEDIAMINE [DMTDA]**

No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC)

#### Engineering Controls

Use local exhaust ventilation sufficient to maintain exposure levels below exposure limit concentrations (Refer to AS-1668). If exhaust ventilation is not available or inadequate, use approved respirator to Australian Standards (Refer to AS/NZS 1715/1716). Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

#### Personal Protection Equipment

**Clothing:** Wear suitable protective clothing to prevent skin contact.

**Gloves:** Wear impervious gloves to prevent skin contact - PVC or natural rubber.

**Eyes:** Wear chemical splash goggles (Australian Standard AS-1337) or approved equivalent to protect eyes. Eye protection must be compatible with respiratory protection.

**Respiratory Protection:** Avoid breathing of vapors/gases. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a respirator for organic vapors with (disposable) or with replaceable filters is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with acceptable international Standard is recommended.

### VII. PHYSICAL AND CHEMICAL PROPERTIES.

**Physical state:** Liquid

**Color:** Pale yellow to amber colored clear liquid

**Odor:** Slight Amine

**Boiling Point:** Not applicable

**Melting Point:** Decomposes at 175°C

**Flash Point:** 176°C (PMCC)

**Vapor pressure:** 0.89mmHg @ 146°C

**Specific gravity:** Approx. 1.2

**Water solubility:** < 1%

**pH:** Not applicable

**Odor threshold:** Not available

**Evaporation rate:** Not applicable

### VIII. STABILITY AND REACTIVITY

**Reactivity:** Stable under normal conditions of use.

**Incompatibilities:** Strong acids and oxidizing agents.

**Hazardous decompositions:** Emits toxic fumes including oxides of carbon, nitrogen and sulphur when heated to decomposition

**Conditions To Avoid:** Heat, flames, ignition sources and incompatibles.

**Polymerization:** Will not occur

## IX. TOXICOLOGY INFORMATION

### **Toxicity data:**

No adverse health effects are expected, if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms and effects that may arise if the product is mishandled and overexposure occurs are:

#### ***Swallowed:***

Harmful if swallowed. May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach, which may lead to nausea, vomiting and diarrhoea.

#### ***Eye:***

Not expected to be an eye irritant, however, may cause irritation to the eyes, with effects including: tearing and stinging.

#### ***Skin:***

Will cause irritation to the skin, with effects including: redness, itchiness, and possible dermatitis.

#### ***Inhaled:***

Not expected to be a route of exposure due to low volatility of DMTDA at room temperature, however, may cause irritation to the nose, throat and respiratory system.

#### ***Chronic:***

Prolonged or repeated skin contact may lead to dermatitis. Prolonged or repeated contact with this substance will cause sensitization by skin contact.

### **Toxicological Data:**

#### **ACUTE DATA:**

LD50 (oral, rat) = 1515 mg/kg

LD50 (dermal, rabbit) > 2000 mg/kg

#### **Repeated Exposure:**

Rats given Di-(methylthio)toluenediamine (DMTDA) in the diet for up to 90 days showed increased liver metabolic activity. There was kidney effects observed that were unique to male rats. These effects were similar to changes that have been observed in male rats given hydrocarbons. These effects resolved in animals allowed 30 days recovery. Rats treated for 24 months did not have microscopic alterations in any tissues compared to the control animals. Tumours seen in control and treated animals were usual for age and strain of rats.

**GENETIC TEST DATA:**

**Ames Salmonella/Microsome:** dose response increase with S-9

CHO/HGPRT: no activity

In Vitro Cytogenetics: increase in aberrations with and without S-9 at toxic levels

**Unscheduled DNA Synthesis:** no activity

**In Vitro Cell Transformation:** no activity

**X. ECOLOGICAL INFORMATION**

**Ecotoxicity:**

There is no information available for this substance.

**Mobility:**

There is no information available for this substance.

**Persistence / Degradability:**

There is no information available for this substance.

**Chemical Fate Information:**

Environmentally hazardous substance. Do not allow into drains or waterways. Do not allow to contaminate soil.

**XI. DISPOSAL CONSIDERATIONS**

Dispose in accordance with all applicable regulations of the country. However, it is the responsibility of the generator of the waste to properly classify, transport and dispose of the waste.

**XII. TRANSPORTATION INFORMATION**

**Road Transport**

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Packing Group:** None allocated

**Label:** Harmful (Xn), Irritant (Xi)

**Air Transport**

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Packing Group:** None allocated

**Label:** Harmful (Xn), Irritant (Xi)

**Sea Transport**

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated  
**Packing Group:** None allocated  
**Label:** Harmful (Xn), Irritant (Xi)

### XIII. REGULATORY INFORMATION

Not available

### XIV: OTHER INFORMATION

**Key Legend Information:**

NOHSC - National Occupational Health & Safety Commission {Formerly Worksafe}[Aust]  
SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons [Aust]  
TWA - Time Weighted Average [Int]  
STEL - Short Term Exposure Limit [Int]  
AICS - Australian Inventory of Chemical Substances  
EPA - Environmental Protection Agency [Int]  
NIOSH - National Institute for Occupational Safety and Health [US]  
AS/NZS 1715 - Selection, use and maintenance of respiratory protective devices. [Aust/NZ]  
AS/NZS 1716 - Respiratory protective devices. [Aust/NZ]  
IATA - International Aviation Transport Authority [Int]  
ICAO - International Civil Aviation Organization [Int]

**Disclaimer**

This MSDS summarizes our best knowledge of the health and safety hazard information available on the product and the measures to be used to handle and use the product safely. Each user should read this MSDS and consider the information in connection with the way the product is intended to be handled or used.

**END**

