





# Material Safety Data Sheet Dimethyl Maleate MSDS

# **Section 1: Chemical Product and Company Identification**

Product Name: Dimethyl Maleate

Catalog Codes: SLD3232

CAS#: 624-48-6

**RTECS:** EM6300000

TSCA: TSCA 8(b) inventory: Dimethyl Maleate

CI#: Not available.

Synonym: Maleic Acid, Dimethyl Ester

Chemical Name: Dimethyl Maleate

Chemical Formula: C6-H8-O4

**Contact Information:** 

Sciencelab.com, Inc. 14025 Smith Rd. Houston, Texas 77396

US Sales: 1-800-901-7247

International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

# **Section 2: Composition and Information on Ingredients**

#### Composition:

Name	CAS#	% by Weight
Dimethyl Maleate	624-48-6	100

Toxicological Data on Ingredients: Dimethyl Maleate: ORAL (LD50): Acute: 1410 mg/kg [Rat].

#### Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion.

#### **Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to gastrointestinal tract, eye, lens or cornea. Repeated or prolonged exposure to the substance can produce target organs damage.

### **Section 4: First Aid Measures**

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

#### **Skin Contact:**

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

### **Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

#### **Serious Inhalation:**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

#### Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

# **Section 5: Fire and Explosion Data**

Flammability of the Product: Combustible.

Auto-Ignition Temperature: Not available.

Flash Points: CLOSED CUP: 91.176°C (196.1°F).

Flammable Limits: Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Not available.

### **Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

#### **Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

#### Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

#### Large Spill:

Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk.

# **Section 7: Handling and Storage**

#### **Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Wear suitable protective clothing If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

#### Storage:

Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

# **Section 8: Exposure Controls/Personal Protection**

### **Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection: Splash goggles. Lab coat. Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

# **Section 9: Physical and Chemical Properties**

Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: 144.13 g/mole

Color: Not available.

pH (1% soln/water): Not available.

**Boiling Point:** Not available. **Melting Point:** Not available.

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Not available.

# Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available. **Conditions of Instability:** Not available.

Incompatibility with various substances: Not available.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

# **Section 11: Toxicological Information**

**Routes of Entry:** Absorbed through skin. Eye contact. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 1410 mg/kg [Rat].

Chronic Effects on Humans: The substance is toxic to gastrointestinal tract, eye, lens or cornea.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

# Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

#### **Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

# **Section 13: Disposal Considerations**

Waste Disposal:

# **Section 14: Transport Information**

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Toxic Liquid, Organic, n.o.s( Dimethyl Maleate) : UN2810 PG: III

Special Provisions for Transport: Not available.

# **Section 15: Other Regulatory Information**

Federal and State Regulations: TSCA 8(b) inventory: Dimethyl Maleate

#### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

#### Other Classifications:

#### WHMIS (Canada):

CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).

DSCL (EEC):

R22- Harmful if swallowed. R36/38- Irritating to eyes and skin.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 2

Reactivity: 0

Personal Protection: j

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 1
Reactivity: 0

Specific hazard:

**Protective Equipment:** 

Gloves. Lab coat. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

#### **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

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