





# **Material Safety Data Sheet Methyl-p-toluenesulfonate MSDS**

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

**Product Name:** Methyl-p-toluenesulfonate

Catalog Codes: SLM3253

CAS#: 80-48-8

RTECS: XT7000000

**TSCA:** TSCA 8(b) inventory: Methyl-p-toluenesulfonate

CI#: Not available.

**Synonym:** Benzenesulfonic acid, 4-methyl-, methyl ester; Methyl-4-methylbenzenesulfonate; Methyl-p-methylbenzenesulfonate; Methyl-p-tosylate; Methyl-4-toluene-4-sulfonate; Methyl tosylate; p-Toluenesulfonic

acid, Methyl Ester

Chemical Name: p-Toluenesulfonic acid, methyl ester

Chemical Formula: C8-H10-O-3-S

## **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
Methyl-p-toluenesulfonate	80-48-8	100

Toxicological Data on Ingredients: Methyl-p-toluenesulfonate: ORAL (LD50): Acute: 341 mg/kg [Rat].

## **Section 3: Hazards Identification**

## **Potential Acute Health Effects:**

Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant). Slightly hazardous in case of eye contact (irritant).

## **Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

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

### **Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

#### Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

#### Serious Skin Contact:

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

#### Inhalation:

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

Serious Inhalation: Not available.

#### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

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

Flammability of the Product: May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

Flash Points: CLOSED CUP: 152°C (305.6°F).

Flammable Limits: Not available.

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

## Fire Hazards in Presence of Various Substances:

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

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

Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks.

#### **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:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## Large Spill:

If the product is in its solid form: Use a shovel to put the material into a convenient waste disposal container. If the product is in its liquid form: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## **Section 7: Handling and Storage**

#### Precautions:

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

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

#### **Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

## Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. 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: Solid. (Crystals solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 186.23 g/mole

Color: Brown. (Light.)

**pH (1% soln/water):** Not applicable. **Boiling Point:** 292°C (557.6°F)

Melting Point: 28°C (82.4°F)

Critical Temperature: Not available.

Specific Gravity: 1.23 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available. Ionicity (in Water): Not available.

**Dispersion Properties:** See solubility in water, diethyl ether.

Solubility:

Soluble in diethyl ether. Insoluble in cold water, hot water.

## **Section 10: Stability and Reactivity Data**

**Stability:** The product is stable.

**Instability Temperature:** Not available.

Conditions of Instability: Excess heat, incompatible materials, dust generation

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# **Section 11: Toxicological Information**

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 341 mg/kg [Rat].

Chronic Effects on Humans: Not available.

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

irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

May affect genetic material (mutagenic). May cause cancer based on animal test data

**Special Remarks on other Toxic Effects on Humans:** 

Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation. Inhalation: Causes respiratory tract irritation. Ingestion: Harmful if swallowed. Causes digestive tract irritation.

# **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:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

# **Section 14: Transport Information**

**DOT Classification:** Not a DOT controlled material (United States).

Identification: Not applicable.

**Special Provisions for Transport:** Not applicable.

# **Section 15: Other Regulatory Information**

## Federal and State Regulations:

Pennsylvania RTK: Methyl-p-toluenesulfonate Massachusetts RTK: Methyl-p-toluenesulfonate TSCA 8(b) inventory: Methyl-p-toluenesulfonate

## 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 D-1B: Material causing immediate and serious toxic effects (TOXIC).

## DSCL (EEC):

R22- Harmful if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. R40- Possible risks of irreversible effects. R43- May cause sensitization by skin contact. S24- Avoid contact with skin. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

**Personal Protection: E** 

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

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

## **Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

## **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

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