Material Safety Data Sheet
Mesitylene

ACC# 96021

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Mesitylene  
**Catalog Numbers:** AC125580000, AC125580010, AC125580050, AC125582500, AC161320000, AC161320010, AC161320050, AC161322500, AC9875405, AC9875406, XXAC12558-65, XXAC12558-72  
**Synonyms:** 1,3,5-Trimethylbenzene  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
For information, call: 201-796-7100  
Emergency Number: 201-796-7100  
For CHEMTREC assistance, call: 800-424-9300  
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-67-8</td>
<td>1,3,5-trimethylbenzene</td>
<td>97-100</td>
<td>203-604-4</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: colorless liquid. Flash Point: 44 deg C.  
**Warning! Flammable liquid and vapor.** Causes eye irritation. Causes respiratory tract irritation. May cause blood abnormalities. May cause central nervous system depression.  
**Target Organs:** Blood, central nervous system.

**Potential Health Effects**  
**Eye:** Causes eye irritation.  
**Skin:** May cause skin irritation. Excessive drying of the skin may result from repeated or prolonged contact.  
**Inhalation:** May cause irritation of the digestive tract.  
**Inhalation:** Causes respiratory tract irritation. May cause anemia. May cause drowsiness, unconsciousness, and central nervous system depression. Vapors may cause dizziness or suffocation. May cause asthma-like symptoms and sleepiness.  
**Chronic:** Prolonged or repeated skin contact may cause irritation. Chronic inhalation may cause effects similar to those of acute inhalation.

Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.  
**Skin:** Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.  
**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.  
**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If
Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

**Flash Point:** 44 deg C (111.20 deg F)

**Autoignition Temperature:** 550 deg C (1,022.00 deg F)

**Explosion Limits, Lower:** 1.00 vol %

**Upper:** 6.00 vol %

**NFPA Rating:** (estimated) Health: 0; Flammability: 2; Instability: 0

Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3,5-trimethylbenzene</td>
<td>25 ppm TWA (listed under Trimethyl benzene).</td>
<td>25 ppm TWA; 125 mg/m3 TWA</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** 1,3,5-trimethylbenzene: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a
NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Appearance:** colorless  
**Odor:** Peculiar aromatic  
**pH:** Not available.  
**Vapor Pressure:** 0.330 kPa @20°C  
**Vapor Density:** 4.1 (air=1)  
**Evaporation Rate:** Not available.  
**Viscosity:** Not available.  
**Boiling Point:** 163 - 166 deg C @ 760.00mm Hg  
**Freezing/Melting Point:** -45 deg C  
**Decomposition Temperature:** Not available.  
**Solubility:** miscible with alcohol, benzene and ether  
**Specific Gravity/Density:** 0.8640g/cm3  
**Molecular Formula:** C9H12  
**Molecular Weight:** 120.19

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat.  
**Incompatibilities with Other Materials:** Strong oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.  
**Hazardous Polymerization:** Will not occur.

### Section 11 - Toxicological Information

**RTECS#:**  
**CAS# 108-67-8: OX6825000**  
**LD50/LC50:**  
**CAS# 108-67-8:** 
- Draize test, rabbit, eye: 500 mg/24H Mild;  
- Draize test, rabbit, skin: 20 mg/24H Moderate;  
- Inhalation, rat: LC50 = 24000 mg/m3/4H;  
- Oral, mouse: LD50 = 7000 mg/kg;  
- Oral, rat: LD50 = 5000 mg/kg;  

**Carcinogenicity:**  
**CAS# 108-67-8:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.  
**Epidemiology:** No information found  
**Teratogenicity:** No information found  
**Reproductive Effects:** No information found  
**Mutagenicity:** Sister chromatid xchange(Intraperitoneal,mouse)=1800 mg/kg.  
**Neurotoxicity:** No information found  
**Other Studies:**

### Section 12 - Ecological Information
Ecotoxicity: Fish: Fathead Minnow: LC50 = 3.48 mg/L; 96 Hr; Unspecified
Fish: Goldfish: LC50 = 12.5-13.0 mg/L; 96 Hr; Unspecified
Fish: Goldfish: LC50 = 13.7 mg/L; 72 Hr; Unspecified
Water flea Daphnia: EC50 = 50 mg/L; 72 Hr; Unspecified
No data available.

Environmental: According to a classification scheme, BCF values of 23 to 342, measured in carp, suggest that bioconcentration in aquatic organisms may occur. Biodegradation may be an important fate process for this compound in water; acclimation may increase the rate of biodegradation.

Physical: No information found.

Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>1,3,5-TRIMETHYLBENZENE</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>3</td>
</tr>
<tr>
<td>UN Number:</td>
<td>UN2325</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>III</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 108-67-8 is listed on the TSCA inventory.

Health & Safety Reporting List

Chemical Test Rules

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.

SARA Codes

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# 108-67-8 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, (listed as Trimethyl benzene), Minnesota, (listed as Trimethyl benzene), Massachusetts.

**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:**

- XI N

**Risk Phrases:**

- R 10 Flammable.
- R 37 Irritating to respiratory system.
- R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases:**

- S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

**WGK (Water Danger/Protection)**

- CAS# 108-67-8: 2

**Canada - DSL/NDSL**

CAS# 108-67-8 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of B3, D2B. 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.

**Canadian Ingredient Disclosure List**

CAS# 108-67-8 is listed on the Canadian Ingredient Disclosure List.

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**Section 16 - Additional Information**

**MSDS Creation Date:** 5/19/1999

**Revision #5 Date:** 3/15/2007

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if Fisher has been advised of the possibility of such damages.