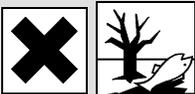


Material Safety Data Sheet

| HAZARD WARNINGS | RISK PHRASES | PROTECTIVE CLOTHING |
|---|--|---|
|  | Combustible material; avoid heat and sources of ignition. Harmful compound, minimize exposure. Irritating to skin, eyes, and the respiratory system. Dangerous for the environment. |  |

Section I. Chemical Product and Company Identification

| | | | |
|------------------|---|---------------------------------|---|
| Chemical Name | 1,3,5-Trimethylbenzene | | |
| Catalog Number | T0470 | Supplier | TGI America 9211 N. Harborside St. Portland OR 1-800-423-8616 |
| Synonym | Mesitylene | | |
| Chemical Formula | (CH ₃) ₃ C ₆ H ₃ | | |
| CAS Number | 108-67-8 | In case of Emergency Call | Chemtrec® (800) 424-9300 (U.S.) (703) 527-3887 (International) |

Section II. Composition and Information on Ingredients

| Chemical Name | CAS Number | Percent (%) | TLV/PEL | Toxicology Data |
|------------------------|------------|-------------------|----------------|---|
| 1,3,5-Trimethylbenzene | 108-67-8 | Min. 97.0 (GC) | Not available. | Rat LC ₅₀ (inhalation) 24gm/m ³ /4H |

Section III. Hazards Identification

| | |
|------------------------|--|
| Acute Health Effects | Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death. Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound. |
| Chronic Health Effects | CARCINOGENIC EFFECTS : Not available. MUTAGENIC EFFECTS : Not available. TERATOGENIC EFFECTS : Not available. DEVELOPMENTAL TOXICITY Not available. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions. |

Section IV. 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. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. |
| Inhalation | If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve. |
| Ingestion | INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. 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. SEEK IMMEDIATE MEDICAL ATTENTION in case of ingestion of a radioactive material. |

Section V. Fire and Explosion Data

| | | | |
|--------------------------------------|---|------------------|----------------|
| Flammability | Combustible. | Auto-Ignition | Not available. |
| Flash Points | 44.44°C (112°F). | Flammable Limits | LOWER: 0.88% |
| Combustion Products | These products are toxic carbon oxides (CO, CO ₂). | | |
| Fire Hazards | Not available. | | |
| Explosion Hazards | 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 | Combustible liquid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. Consult with local fire authorities before attempting large scale fire-fighting operations. | | |

Continued on Next Page

Emergency phone number (800) 424-9300

Section VI. Accidental Release Measures

Spill Cleanup Instructions Combustible material. Harmful material. Irritating material. Dangerous for the environment. Keep away from heat. Mechanical exhaust required. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. DO NOT touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Consult federal, state, and/or local authorities for assistance on disposal.

Section VII. Handling and Storage

Handling and Storage Information COMBUSTIBLE. HARMFUL. IRRITANT. DANGEROUS FOR THE ENVIRONMENT. Keep away from heat. Mechanical exhaust required. Avoid excessive heat and light. Do not breathe gas/fumes/ vapor/spray. Always store away from incompatible compounds such as oxidizing agents.

Section VIII. 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 station and safety shower is proximal to the work-station location.

Personal Protection Splash goggles. Lab coat. Vapor respirator. Boots. Gloves. A MSHA/NIOSH approved respirator must 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 IX. Physical and Chemical Properties

| | | | |
|-----------------------|---------------------------------|-----------------------|--|
| Physical state @ 20°C | Liquid. (Clear, colorless.) | Solubility | Practically insoluble in water. Miscible with alcohol, ether, benzene. |
| Specific Gravity | 0.864 (water=1) | | |
| Molecular Weight | 120.19 | Partition Coefficient | Not available. |
| Boiling Point | 163 to 166°C (325.4 to 330.8°F) | Vapor Pressure | 0.3 kPa (@ 25°C) |
| Melting Point | -45°C (-49°F) | Vapor Density | 4.1 (Air = 1) |
| Refractive Index | 1.49541 @ 18°C | Volatility | Not available. |
| Critical Temperature | Not available. | Odor | Peculiar |
| Viscosity | Not available. | Taste | Not available. |

Section X. Stability and Reactivity Data

Stability This material is stable if stored under proper conditions. (See Section VII for instructions)

Conditions of Instability Avoid excessive heat and light.

Incompatibilities Reactive with strong oxidizing agents, nitric acid.

Section XI. Toxicological Information

RTECS Number OX6825000

Routes of Exposure Eye Contact. Ingestion. inhalation.

Toxicity Data Rat LC₅₀ (inhalation) 24gm/m³/4H

Chronic Toxic Effects **CARCINOGENIC EFFECTS** : Not available.
MUTAGENIC EFFECTS : Not available.
TERATOGENIC EFFECTS : Not available.
DEVELOPMENTAL TOXICITY Not available.
Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.

Acute Toxic Effects Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death. Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Section XII. Ecological Information

Ecotoxicity Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Environmental Fate Mesitylene's production and use as a dyestuff intermediate, solvent, paint thinner, and as a UV oxidation stabilizer for plastics may result in its release to the environment through various waste streams. Mesitylene is released directly to the environment as a component of gasoline and as an emission from gasoline-powered vehicles, municipal waste-treatment plants, and coal-fired power stations. If released to the atmosphere, mesitylene will exist solely in the vapor phase in the ambient atmosphere, based on a measured vapor pressure of 2.48 mm Hg at 25 deg C. Vapor-phase mesitylene is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals and nitrate radicals with half-lives of about 7 hours and 10-67 days, respectively. A measured Koc value of 660 suggests that mesitylene will have low mobility in soil. Volatilization from moist and dry soil surfaces should occur based on a measured Henry's Law constant of 8.77×10^{-3} atm-cu m/mole and the vapor pressure of this compound, respectively. Mesitylene should aerobically biodegrade in both soil and water. Mesitylene was not degraded in methanogenic aquifer microcosms. In water, mesitylene may adsorb to sediment or particulate matter based on its Koc value. This compound should volatilize from water surfaces given its Henry's Law constant. Estimated half-lives for a model river and model lake are 3 hours and 4 days, respectively. Bioconcentration in aquatic organisms may occur based on BCF values of 23-342, measured in carp. The general population will be exposed to mesitylene via inhalation of ambient air, ingestion of food and drinking water, and dermal contact with vapors, food and other products containing mesitylene. Occupational exposure may occur through inhalation and dermal contact with this compound at workplaces where it is produced or used.

Section XIII. Disposal Considerations

Waste Disposal Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

Section XIV. Transport Information

DOT Classification CLASS 3: Flammable liquid.

PIN Number UN2325

Proper Shipping Name 1,3,5-Trimethylbenzene

Packing Group (PG) III

DOT Pictograms

**Section XV. Other Regulatory Information and Pictograms**

TSCA Chemical Inventory (EPA) This compound is **ON** the EPA Toxic Substances Control Act (TSCA) inventory list.

WHMIS Classification (Canada) CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). This product is subject to SARA section 313 reporting requirements (8a PAIR).

EINECS Number (EEC) 203-604-4

EEC Risk Statements R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38- Irritating to eyes, respiratory system and skin.
R51- Toxic to aquatic organisms.
R53- May cause long-term adverse effects in the aquatic environment.

Japanese Regulatory Data Not available.

Section XVI. Other Information

Version 1.0
Validated on 6/7/2002.
Printed 3/11/2005.

Notice to Reader

TCI laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.