

## **MATERIAL SAFETY DATA SHEET**

### **Meta-XYLENE** **(For Synthesis) (m-Xylene)** **MSDS CAS: 108-38-3**

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

##### **Section 1: Chemical Product**

**Product Name:** meta-XYLENE (m-Xylene)

**CAS#:** 108-38-3

**Synonym:** 1,3-Dimethylbenzene

**Chemical Name:** m-Xylene

**Chemical Formula:** C<sub>6</sub>H<sub>4</sub>(CH<sub>3</sub>)<sub>2</sub>

**Brand :** OXFORD

##### **Details Of The Supplier Of The Safety Data Sheet :**

##### **Company identification:**

**OXFORD LAB FINE CHEM LLP**

**Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,  
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#### **Section 2: Composition and Information on Ingredients**

##### **Composition:**

<b>Name</b>	<b>CAS #</b>	<b>% by Weight</b>
<b>{m-}Xylene</b>	<b>108-38-3</b>	<b>100</b>

**Toxicological Data on Ingredients:** m-Xylene: ORAL (LD50): Acute: 5000 mg/kg [Rat.]. DERMAL (LD50): Acute: 14100 mg/kg [Rabbit.].

## Section 3: Hazards Identification

### Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

### Potential Chronic Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to blood, kidneys, the nervous system, liver. 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 medical attention.

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

**Serious Inhalation:** Not available.

**Ingestion:** Do not induce vomiting. 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:** Flammable.

**Auto-Ignition Temperature:** 527°C (980.6°F)

**Flash Points:** CLOSED CUP: 25°C (77°F). OPEN CUP: 28.9°C (84°F) (Cleveland).

**Flammable Limits:** LOWER: 1.1% UPPER: 7%

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>).

**Fire Hazards in Presence of Various Substances:** Highly flammable in presence of open flames and sparks, of heat.

**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:**

Flammable liquid, insoluble in water. **SMALL FIRE:** Use DRY chemical powder. **LARGE FIRE:** Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

**Special Remarks on Fire Hazards:**

Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition it emits acrid smoke and irritating fumes.

**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:**

Flammable liquid, insoluble in water. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## 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. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes Keep away from incompatibles such as oxidizing agents.

### 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. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

## 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:

TWA: 100 STEL: 150 (ppm) from ACGIH (TLV) TWA: 434 STEL: 651 (mg/m<sup>3</sup>) from ACGIH Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

Physical state and appearance:	Liquid. (Liquid.)
Odor:	Not available.
Taste:	Not available.
Molecular Weight:	106.17 g/mole
Color:	Colorless

## Section 9: Physical and Chemical Properties (Continued)

pH (1% soln/water):	Not available.
Boiling Point:	139.3°C (282.7°F)
Melting Point:	-47.87°C (-54.2°F)
Critical Temperature:	Not available.
Specific Gravity:	0.86 (Water = 1)
Vapor Pressure:	6 mm of Hg (@ 20°C)
Vapor Density:	3.7 (Air = 1)
Volatility:	Not available.
Odor Threshold:	0.62 ppm
Water/Oil Dist. Coeff.:	Not available.
Ionicity (in Water):	Not available.
Dispersion Properties:	See solubility in water, methanol, diethyl ether.
Solubility:	Easily soluble in methanol, 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:	Not available.
Incompatibility with various substances:	Reactive with oxidizing agents.
Corrosivity:	Non-corrosive in presence of glass.
Special Remarks on Reactivity:	Not available.
Special Remarks on Corrosivity:	Not available.
Polymerization:	No.

## Section 11: Toxicological Information

**Routes of Entry:** Eye contact.

**Toxicity to Animals:** Acute oral toxicity (LD50): 5000 mg/kg [Rat.]. Acute dermal toxicity (LD50): 14100 mg/kg [Rabbit].

**Chronic Effects on Humans:** The substance is toxic to blood, kidneys, the nervous system, liver.

## Section 11: Toxicological Information (Continued)

### Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

### Special Remarks on Chronic Effects on Humans:

0347 Animal: embryotoxic, foetotoxic, passes through the placental barrier. 0900 Detected in maternal milk in human. Narcotic effect; may cause nervous system disturbances.

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

Material is irritating to mucous membranes and upper respiratory tract.

## 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 more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

### Waste Disposal:

## Section 14: Transport Information

### Land transport (ADR-RID)

Proper shipping name: XYLENES

UN N°: 1307

H.I. nr: 30

ADR - Class: 3

### Sea transport (IMDG) [English only]

Proper shipping name: XYLENES

UN N°: 1307

IMO-IMDG - Class or division: 3: Flammable liquid.

IMO-IMDG - Packing group: III

### Air transport (ICAO-IATA) [English only]

Proper shipping name: XYLENES

UN N°: 1307

IATA - Class or division: 3: Flammable liquid.

IATA - Packing group: III

## Section 15: Other Regulatory Information

### Federal and State Regulations:

Pennsylvania RTK: m-Xylene Massachusetts RTK: m-Xylene TSCA 8(b) inventory: m-Xylene SARA 313  
toxic chemical notification and release reporting: m-Xylene CERCLA: Hazardous substances.: m-Xylene

### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

### Other Classifications:

WHMIS (Canada):

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-2B: Material causing  
other toxic effects (TOXIC).

DSCL (EEC):

R10- Flammable. R38- Irritating to skin. R41- Risk of serious damage to eyes.



## **Section 15: Other Regulatory Information (Continued)**

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

**Health Hazard: 2**

**Fire Hazard: 3**

**Reactivity: 0**

**Personal Protection: j**

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

**Health: 2**

**Flammability: 3**

**Reactivity: 0**

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

## **Section 16 - Additional Information**

**References:** Not available.

**Other Special Considerations:** Not available.



## ***Disclaimer:***

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