Material Safety Data Sheet

Ortho xylene

Section 1 - Product Identification

Synonyms : O-xylene; 1,2-Dimethylbenzene
Molecular Weight : 106.17 g/mol
Chemical Formula : C_8H_{10}
Company Identification : Tradeasia International Pte. Limited
Address : 133 Cecil Street # 12-03 Keck Seng Tower, Singapore
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Recommended use of the chemical and restrictions on use:

Section 2 – Composition/Information on Ingredients

Chemical Name	EC/CAS No	Weight, %
O - xylene	95-47-6	<= 100%

Section 3 – Hazards Identification

3.1 Classification of the substance or mixture

Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4),H312
Skin corrosion/irritation (Category 2), H315
Serious eye damage/eye irritation (Category 2), H319
Specific target organ toxicity -single exposure (Category 3), Respiratory system, H335
Aspiration hazard (Category 1), H304
For the full text of the H-Statements mentioned in this Section, see Section 16.

3.2 Label elements

Signal word - Danger
Hazard statement(s)

H226 - Flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H312 + H332 - Harmful in contact with skin or if inhaled
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
Precautionary statement(s)
Prevention
P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Response
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P331 - Do NOT induce vomiting.
P337 + P313 - If eye irritation persists: Get medical advice/ attention.
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol - resistant foam to extinguish.
Storage
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 - Store in a well-ventilated place. Keep cool.

3.3 Other hazards

None

Section 4 – First-Aid Measures

4.1. Description of first aid mesaures

Skin contact

Wash off with soap and plenty of water. Consult a physician.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Precaution

N.A.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed

N.A.

Section 5 – Fire Fighting Measures

5.1. Suitable Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Specific hazards arising from the chemical

Carbon oxides.

5.3. Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Section 6 – Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.1.1 For non-emergency personnel

N.A

6.1.2. For emergency personnel

N.A

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 7 – Handling and Storage

7.1. Precautions for safe Handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.2.1 Incompatible product

N.A.

7.2.2 Incompatible materials

N.A.

Section 8 – Exposure Controls/Personal Protection

8.1. Control parameters

8.2. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eyes and hands protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Fluorinated rubber

Minimum layer thickness:0,7 mm

Break through time: 480 min

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0,4 mm
Break through time: 30 min
test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Skin protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Other information

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance : colourless liquid
Odour : N.A.
Odour threshold : N.A.
pH @ 25° C : N.A
Melting point : -26 - -23 °C
Boiling point : 143 - 145 °C
Density: N.A.
Flash point : 31 °C – closed cup
Evaporation rate : N.A.
Flammability : N.A.
Upper/lower flammability or explosive limits : Upper explosion limit: 6,7 % (V)
Lower explosion limit: 0,9 %(V)

Vapour pressure : 16,0 mmHg at 37,7 °C

Vapour density : N.A.

Relative density: 0,879 g/cm3 at 20 °C

Solubility: partially soluble in water

Auto-ignition temperature : 464,0 °C

Decomposition temperature : N.A.

Viscosity : N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Section 10 – Stability and Reactivity

10.1. Reactivity

N.A.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

N.A

10.4. Conditions to avoid:

Heat, flames and sparks.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

Section 11 – Toxicological Information

Information on toxicological effects

Acute toxicity

LC50 Inhalation - Rat - Male - 6 h - 18.800 mg/m3(o-Xylene)

LD50 Intraperitoneal - Mouse - 1.364 mg/kg(o-Xylene)

Skin corrosion / irritation

Skin - Rabbit(o-Xylene)

Result: Irritating to skin. -24 h

Serious eye damage/ irritation

N.A.

Respiratory or skin sensitization

N.A.

Germcell mutagenicity

N.A.

Carcinogenicity

N.A.

Reproductive toxicity

N.A.

STOT-single exposure

N.A.

STOT-repeated exposure

N.A.

Aspiration Hazard

May be fatal if swallowed and enter airways.

Potential health effects

N.A

Section 12 – Ecological Information

12.1.Toxicity

Toxicity to fish

LC50 - Lepomis macrochirus (Bluegill) - 16,10 mg/l-96 h(o-Xylene)

12.2. Persistence and degradability

Biodegradability

Aerobic - Exposure time 28 d(o-Xylene)

Result: 69,67 % - Not readily biodegradable. (OECD Test Guideline 301F)

12.3. Bioaccumulative potential

N.A

12.4. Mobility in soil

N.A.

12.5. Other adverse effects

Harmful to aquatic life with long lasting effects.

Section 13 – Disposal Considerations

13.1. Disposal methods Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable.Offer surplus and non-recyclable solutions to a licensed disposal company.

13.2 Ecotoxicity Effect

N.A.

Section 14 – Transport Information

14.1. UN number : N.A.

14.2. UN proper shipping name : N.A

14.3. Transport of hazard classes : N.A

14.4. Packing group : N.A

14.5. Environmental hazards : N.A.

14.6. Special precautions for user : N.A

14.7. Incompatible materials: N.A.

Section 15 – Regulatory Information

15.1. Safety, health and environmental regulations for the substance/mixture

Notification status:

U.S. EPA TSCA Inventory	N.A.
Canadian DSL	N.A.
EINECS	N.A.
South Korea	N.A.
Japanese MITI	N.A.

Ensure all national/local regulations are observed.

Section 16 : Additional Information

Revision date: 31/7/2019

Other information: None.

16.1. Disclaimer of Liability

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