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Section I - Product Identification

Product: A clear colorless liquid with a characteristic aromatic odor. Xylene is a mixture of the ortho, para and meta xylene isomers with ethylbenzene. Of the three isomers, meta and para predominate.

Intended Uses: A general purpose laboratory reagent.

Uses advised against: Not for consumer use.

Country of Origin: United States.

Manufacturer Identification

Medical Chemical Corp.
19430 Van Ness Ave.
Torrance, CA 90501

Customer Service: Phone (310)787-6800
Email. customerservice@med-chem.com
FAX (310)787-4464

Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.



Section II - Hazard Identification

This item is considered hazardous by OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquid: Category 3 (H226). Flammable liquid and vapor.

Eye damage/eye irritation: Category 2 (H319). Causes serious eye irritation.

Acute toxicity (Oral): Category 4 (H302). Harmful if swallowed.

Acute toxicity (Inhalation): Category 4 (H332). Harmful if inhaled.

Acute toxicity (Dermal): Category 4 (H312). Harmful in contact with skin.

Signal word: Warning.

Hazard statements

According to the harmonized classification and labeling required by OSHA and the EU, this substance is a flammable liquid and vapor, causes serious eye irritation and may cause drowsiness or dizziness. In case of fire, use carbon dioxide, dry chemical or alcohol foam fire extinguishers.

Precautionary statements

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautions against static discharge.

P261: Avoid breathing fumes/gas/mist/vapors/spray.

P271: Use only outdoors or in a well-ventilated area.

P264: Wash hands thoroughly after handling.

P280 Wear protective clothes and eye protection.

P362+P364: Take off contaminated clothing and wash it before reuse.

P370+P378: In case of fire: Use CO₂, dry chemical or alcohol foam to extinguish.

Safety Ratings

Health: Hazardous **Flammability:** Flammable **Reactivity:** Unstable if heated **Contact:** Slight

Recommended safety equipment: safety goggles, lab coat and proper gloves

NFPA Ratings

Health = Can cause temporary incapacitation or residual injury.

Flammability = 3. Can be ignited under almost all ambient temperatures.

Reactivity = 1 Normally stable. High temperatures make unstable.

Potential Health Effects

highly flammable liquid and vapor, causes serious eye irritation, may cause damage to organs through prolonged or repeated exposure, may cause respiratory irritation. The vapor is irritating to nose and throat. Skin contact causes local defatting of the skin which will cause irritation and chaffing. May be narcotic in high concentrations.

Inhalation: Irritating to nose and throat. Inhalation of high concentrations can cause CNS disturbance, dizziness, headache, stupor, coma and death.

Ingestion: Although the acute toxicity of xylene is low, ingestion can cause extreme irritation to GI tract. Xylene causes mild to severe pulmonary injury if small amounts are aspirated into the respiratory tract.

Skin contact: Repeated contact causes defatting of the skin with resultant irritation and flaking.

Eye contact: Causes serious eye irritation.

Chronic Exposure: Prolonged exposure may cause pulmonary edema.

Aggravation of preexisting conditions: Impaired kidney and liver function may be aggravated by exposure to xylene. Preexisting eye, skin, and respiratory conditions may also be aggravated.

Section III - Composition/Information on Components

Ingredients	CAS#	EC/list #	%w/w
Mixed Xylenes	1330-20-7	215-535-7	<90%
Ethylbenzene	100-41-4	202-849-4	>10%

Section IV - First Aid Measures

General Advice: Contact a doctor if symptoms persist

Inhalation: Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: Do not induce vomiting. Aspiration of xylene into the lungs may produce death. Get immediate medical attention even if symptoms improve.

Skin Contact: In case of skin contact, remove contaminated clothing and flush with water. Wash affected area with soap and water. Get medical advice if irritation develops.

Eye Contact: In case of eye contact, flush with water for at least 15 minutes and get medical attention.

Section V - Fire Fighting Measures

Fire Extinguishing Media: Alcohol foam, carbon dioxide or dry chemical. Water is ineffective against xylene fires but may be used to cool adjacent containers.

Specific Hazards: Vapors heavier than air and risk of vapor traveling to source of ignition and flashing back. Risk of exploding containers when heated. Vapor in air may form explosion risk.

Special information: Pyrolysis will release toxic carbon monoxide, formaldehyde and methanol.

Special protective gear and precautions: Self contained breathing apparatus and protective gear recommended.

Section VI - Accidental Release Measures

All equipment used when handling the product must be grounded. Take precautions against static ignition. Stop leak if feasible without risk. Use personal protective gear, remove all sources of ignition, absorb with a suitable, non-flammable absorbent and dispose. Should not be released into the environment. Prevent entry into waterways, sewers, basements or confined areas

Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Store away from open flames or other sources of ignition. Keep out of reach of children.

Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH	NIOSH IDLH
Xylene	20 ppm TWA	100 ppm TWA	100 ppm TWA	900 ppm
Ethylbenzene	20 ppm TWA	100 ppm TWA	100 ppm TWA	800 ppm

Legend

ACGIH: American Conference of Governmental Industrial Hygienists.

OSHA: Occupational Safety and Health Administration.

NIOSH: National Institute for Occupational Safety and Health.

IDLH: Immediately dangerous to life or health.

Ventilation System: Local exhaust such as explosion proof chemical fume hoods are recommended. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

Skin protection: Protective gloves are recommended as part of good laboratory practice.

Eye Protection: Laboratory safety goggles or similar products are recommended as part of good laboratory practice.

Section IX - Physical and Chemical Properties

A clear colorless liquid with a characteristic aromatic odor.

Flash point: 27 - 46 °C (81 - 115 °F) TCC

Flammable Limits: LEL 1% UEL 7%

Auto ignition temperature: No data

Boiling point range: 5 °C

Decomposition temperature: No data

Melting point: -47 °C (-53 °F)

pH: Not applicable

Vapor pressure (mm Hg): 6.5 @ 20 °C

Viscosity: 0.6 cSt

Boiling Point: 138 - 148 °C (280 - 298 °F)

Specific gravity: 0.871 @ 60 °F

Evaporation Rate (n-butyl acetate = 1): 0.6

n-Octanol/Water partition as log POW: 3.20

Solubility: Insoluble in water

Vapor density (air = 1): 3.7

Volatile organic carbon (VOC): Not applicable

Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: benzene and other aromatic compounds.

Hazardous polymerization: Will not occur.

Incompatibilities: Oxidizers and strong acids.

Conditions to avoid: heat, flame and sources of ignition.

Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xylene	3,523 mg/kg (Rat)	> 1,700 mg/kg (Rabbit)	29 mg/l 4 h (Rat)
Ethylbenzene	3,500 mg/kg (Rat)	15,400 mg/kg (Rabbit)	18 mg/l 4 h (Rat)

Toxic by ingestion.

Cancer lists

Ingredient *Known Carcinogenicity?* *NTP?* *Anticipated?* *IARC Category*

Xylene	No	No	No	No
Ethylbenzene	No	No	No	No

Section XII - Ecological Information

Xylene evaporates quickly and are not expected to bioaccumulate. The material is removed from the air by dry and liquid adsorption.

Environmental Fate: Biodegradable

Soil Mobility: Unknown

Hazardous to the aquatic environment, acute hazard: Category 2 (H401) Toxic to marine life. Not classified as dangerous to the environment under EC reg. 1272/2008.

For Xylenes

Toxicity to freshwater fish (Rainbow trout): LC50 = 2.6 mg/l, 96 h

Toxicity to invertebrates (water flea): EC50 = 2.9 mg/l, 48 h

Toxicity to freshwater algae (Pseudokirchneriella subcapitata): EC50 = 4.4 mg/l, 72 h

For Ethylbenzene

Toxicity to freshwater fish (Rainbow trout): LC50 = 4.2 mg/l, 96 h

Toxicity to invertebrates (water flea): EC50 = 2 mg/l, 48 h

Toxicity to freshwater algae (Pseudokirchneriella subcapitata): EC50 = 4 mg/l, 96 h

Section XIII - Disposal Considerations

Disposal at a licensed chemical disposal facility is the preferred method. Because xylene is flammable and only slightly water soluble, local governments usually restrict the drain disposal of xylene. Dispose of contents and container in accord with all applicable regulations.

Section XIV - Transportation Information

Bottles that are 1 gallon or smaller are eligible to be shipped under limited quantity exemptions [49 CFR section 173.150(b)].

DOT

Shipping name: Xylenes Hazard Class: 3 Packaging Group III
Hazard Label: Flammable liquid Identification Number: UN1307

IATA

Shipping name: Xylenes Hazard Class: 3 Packaging Group III
Hazard Label: Flammable liquid Identification Number: UN1307

IMDG

Shipping name: Xylenes Hazard Class: 3 Packaging Group III
Hazard Label: Flammable liquid Identification Number: UN1307 EMS-No: F-E, S-D

Section XV - Regulatory Information

Chemical Inventory Status

Ingredient	TSCA	EC
Xylene	Yes	Yes
Ethylbenzene	Yes	Yes

Federal, State and International Regulations

Ingredient	SARA 302		SARA 313		RCRA	TSCA	Ca. Prop 65
	RQ	TPQ	List	Category	261.33	8(D)	
Xylene	No	No	Yes	No	U002	No	No
Ethylbenzene	No	No	Yes	No	U002	No	Yes

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes

SARA 311/312

Acute: Yes
Chronic: Yes
Fire: Yes
Pressure: No
Reactivity: No



Warning: This product contains ethylbenzene which is known to the state of California to cause cancer, birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov

Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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