

Material Safety Data Sheet

Revision Issued: 5/23/2011 Supercedes: 3/19/2007 First Issued: 4/10/1989

Section I - Chemical Product And Company Identification

Product Name: Xylene

CAS Number: 1330-20-7

HBCC MSDS No. CX01000



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Section II - Composition/Information On Ingredients

			Exposure Limits (TWAs) in Air		
Chemical Name	CAS Number	%	ACGIH TLV	OSHA PEL	STEL
Xylene	1330-20-7	79-82	100 ppm	100 ppm	150 ppm
			435 mg/m ³	435 mg/m ³	655 mg/m ³
Ethylbenzene	100-41-4	18-20	100 ppm	100 ppm	125 ppm
			435 mg/m ³	435 mg/m ³	545 mg/m ³
Toluene	108-88-3	< 1	50 ppm	50 ppm	150 ppm

Section III - Hazard Identification

Ingestion: Liquid ingestion may result in vomiting; aspiration (breathing) of vomitus into the lungs must be avoided as even small quantities in the lungs may result in chemical pneumonitis and pulmonary edema/hemorrhage.

Inhalation: High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Negligible hazard at ambient temperature (-18 to 38 Deg C; 0 to 100 Deg F)

Skin: Prolonged and repeated liquid contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis.

Eyes: Short-term liquid or vapor contact may result in slight eye irritation. Prolonged and repeated contact may be more irritating. High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes.

Summary of Chronic Health Hazards: N/A

Signs and Symptoms of Exposure: Prolonged or repeated skin contact with this product tends to remove oils possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria.

Effects of Overexposure: High vapor concentration (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic, and may have other central nervous system effects

including death. This product contains ethylbenzene. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

Medical Conditions Generally Aggravated by Exposure: Petroleum Solvents/Petroleum Hydrocarbons - Skin contact may aggravate an existing dermatitis.

Note to Physicians: If more than 2.0 ml per kg has been ingested and vomiting has not occurred, emesis should be induced with supervision. Keep victim's head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered. Inhalation of high concentrations of this material, as could incur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), kidney, auditory system. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

Section IV - First Aid Measures

Ingestion: If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Do not induce vomiting. If possible, do not leave individual unattended. GET MEDICAL ATTENTION IMMEDIATELY.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Give artificial respiration if not breathing. GET MEDICAL ATTENTION IMMEDIATELY.

Skin: Wash with soap and water. Remove contaminated clothing and shoes; do not reuse until cleaned. If persistent irritation occurs, GET MEDICAL ATTENTION IMMEDIATELY.

Eyes: If splashed into eyes, flush with water for 15 minutes while holding eyelids open or until irritation subsides. If irritation persists, GET MEDICAL ATTENTION IMMEDIATELY.

Section V - Fire Fighting Measures

Flash Point: 70°F (21°C)

Autoignition Temperature: 860°F (460°C)

Lower Explosive Limit: 1.9%

Upper Explosive Limit: 12.3%

Unusual Fire and Explosion Hazards: Vapors are heavier than air and may accumulate in low areas and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from handling point. Flashback of flame to the handling site may occur. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. The following may form: carbon dioxide, and carbon monoxide, and various hydrocarbons. Toxic gases will form upon combustion.

Extinguishing Media: Use water fog, foam, dry chemical or CO₂. Do not use a direct stream of water. Product will float and can be reignited on surface of water.

Special Firefighting Procedures: Evacuate hazard area of unprotected personnel.

Wear proper protective clothing including a NIOSH approved self-contained breathing apparatus. Cool fire-exposed containers with water spray. In the case of large fires, also cool surrounding equipment and structures with water. If a leak or spill has not ignited, use water spray to disperse the vapors.

Section VI - Accidental Release Measures

[Spills may need to be reported to the National Response Center (800/424-8802) CERCLA Reportable Quantity (RQ) is 1000 pounds]. Shut off and eliminate all ignition sources. Keep people away. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent such as sand, earth or other suitable absorbent to spill area. Do not use combustible materials such as sawdust. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas.

Section VII - Handling and Storage

Keep away from heat, sparks and open flames. Wear personal protective equipment. Keep containers tightly closed. Store away from strong oxidizing agents in a cool, dry place with adequate explosion-proof ventilation. Ground equipment to prevent accumulation of static charge. If pouring or transferring materials, containers must be bonded and grounded.

Other Precautions: Do Not weld, heat or drill on or near container; even emptied containers can contain explosive vapors.

Section VIII - Exposure Controls/Personal Protection

Respiratory Protection: Use either an atmosphere-supplying respirator or an air-purifying respirator in confined or enclosed spaces for organic vapors, if needed.

Ventilation: Use only with ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air. Use explosion-proof equipment.

Protective Clothing: Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact.

Eye Protection: Use chemical splash goggles or face shield when eye contact may occur.

Other Protective Clothing or Equipment: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Work/Hygienic Practices: Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean and dry before reuse. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water. Wash hands thoroughly with soap and water before eating, drinking, smoking or using toilet facilities. Do NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible.

Section IX - Physical and Chemical Properties

Physical State: Liquid

pH: N/A

Melting Point/Range: -29.2°F (-34°C)

Boiling Point/Range: 279°F
(137.2°C)

Appearance/Color/Odor: Aromatic odor. Clear, colorless liquid
Solubility in Water (% by Weight): 0.02% @ 77°F (Calculated) **Vapor Pressure (mmHg):** 14.2 @ 100°F (approximate)
Specific Gravity (Water=1): 0.87 @ 60°F
Specific Gravity of Vapor at 1 atm (Air=1): 3.70 Calculated **Molecular Weight:** 106
Vapor Density (Air=1): 3.7 **% Volatiles:** 100
How to detect this compound : N/A **Evaporation Rate, n-BuAcetate = 1:** 0.8 (Approximate)
Odor Threshold: 0.5 ppm **Freezing Point:** -31°F (-35°C)
Viscosity of Liquid, cSt: 0.7 @ 77°F

Section X - Stability and Reactivity

Stability: Stable **Hazardous Polymerization:** Will Not Occur
Conditions to Avoid: Avoid heat, sparks, and open flames.
Materials to Avoid: Strong oxidizing agents, concentrated nitric and sulfuric acids, halogen, and molten sulphur. Temperatures above ambient.
Hazardous Decomposition Products: Fumes, smoke, carbon dioxide, carbon monoxide, aldehydes, various hydrocarbons, and other organic compounds may be formed during combustion.

Section XI - Toxicological Information

Xylenes:
LD50 Oral: 4300 mg/kg (Rat)
LD50 Dermal: 1700 mg/kg (Rabbit)
LC50 Inhalation: 47635 mg/L (Rat) 4 h, 5000 ppm (Rat) 4 h

Ethyl benzene:
LD50 Oral: 3500 mg/kg (Rat)
LD50 Dermal: 15354 mg/kg (Rabbit)
LC50 Inhalation: 17.2 mg/L (Rat) 4 h

Section XII - Ecological Information

Ethyl benzene: Freshwater Algae EC50 72 h 4.6 mg/L

Section XIII - Disposal Considerations

Use non-leaking containers, seal tightly and label properly. Dispose of in accordance with applicable local, county, state and federal regulations.

Section XIV - Transport Information

DOT Proper Shipping Name: Xylenes
DOT Hazard Class/ I.D. No.: 3, UN1307, III

Section XV - Regulatory Information

WARNING

This product contains the following substance known to the state of California to cause cancer: Benzene

This product contains the following substance known to the state of California to cause birth defects: Toluene

Reportable Quantity (Xylene) (CERCLA): 100 Pounds

Reportable Quantity (Ethylbenzene) (CERCLA): 1,000 Pounds

RCRA Code: U239

NFPA Rating: Health - 2; Flammability - 3; Instability - 0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

Carcinogenicity Lists: No **NTP:** No **IARC Monograph:** No **OSHA Regulated:** Yes

Section 313 Supplier Notification: This product contains the following toxic chemical(s) subject to the reporting requirements of SARA TITLE III Section 313 of the Emergency Planning and Community Right-To Know Act of 1986 and of 40 CFR 372:

<u>CAS #</u>	<u>Chemical Name</u>	<u>% By Weight</u>
1330-20-7	Xylene	79-82%
100-41-1	Ethylbenzene	18-20%
108-88-3	Toluene	< 1%

Section XVI - Other Information

Chemical Name: Mixed Xylenes (limited paraxylene content), Ethylbenzene

Synonyms/Common Names: Xylol; Dimethyl Benzene; Methyl Toluene

Chemical Family/Type: Aromatic Hydrocarbon

Sections Changed Since Last Revision: IV, V, VII, IX, X, XI, XII

IMPORTANT! Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This MSDS has been prepared according to the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The MSDS information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, **Hill Brothers Chemical Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Also, additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks prior to use, and then to exercise appropriate precautions for protection of employees and others.