

Material Safety Data Sheet

Xylenes, 96%, Mixed Isomers With Ethylbenzene

ACC# 25150

*filter system
donation 7/10/01*

Section 1 - Chemical Product and Company Identification

MSDS Name: Xylenes, 96%, Mixed Isomers With Ethylbenzene

Catalog Numbers: AC200910250, S71223, S71232, S71233, A4321295, A4321296, A4321297, A4926451, A4926453, A4926455, HC 700 1GAL, HC700 1GAL, HC7001GAL, S71223MF*, S71232MF*, S71233MF*, X0050, X16 4, X16-4, X164, X3P 1GAL, X3P 1GAL001, X3P-1GAL, X3P1GAL, X3P1GAL001, X3S 20, X3S 200, X3S 4, X3S-20, X3S-200, X3S-4, X3S20, X3S200, X3S4, X4 20, X4 4, X4-20, X4-4, X420, X44, X4S 1GAL, X4S-1GAL, X4S1GAL, X5 1, X5 20, X5 200, X5 4, X5 500, X5-1, X5-20, X5-200, X5-4, X5-500, X51, X520, X5200, X54, X5500, X5FB115, X5FB19, X5FB200, X5FB28, X5FB50, X5P 1GAL, X5P-1GAL, X5P1GAL, X5RB115, X5RB19, X5RB200, X5RB50, X5RS115, X5RS200, X5RS28, X5RS50, X5S 4, X5S-4, X5S4, X5SK 4, X5SK-4, X5SK4, X5SS115, X5SS200, X5SS28, X5SS50

Synonyms: Dimethylbenzene; Benzene, dimethyl-; Xylol; Methyltoluene; Violet 3**Company Identification:**

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1330-20-7	Xylenes (o-, m-, p- isomers)	96.0	215-535-7

Hazard Symbols: XN F**Risk Phrases:** 10 20/21 38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 37.8 deg C. **Warning! Flammable liquid.** May be harmful if absorbed through the skin. This substance has caused adverse reproductive and fetal effects in animals. May cause central nervous system depression. Aspiration hazard. May cause liver and kidney damage. Causes digestive and respiratory tract irritation. May cause blood abnormalities. May be harmful if inhaled. Causes severe eye irritation and possible eye injury. Causes moderate skin irritation.

Target Organs: Blood, kidneys, central nervous system, liver, spleen, respiratory system, gastrointestinal system, eyes, bone marrow, skin, nerves.

Potential Health Effects

Eye: Causes severe eye irritation and possible injury.

Skin: Exposure may cause irritation characterized by redness, dryness, and inflammation. Prolonged exposure may cause the formation of vesicles.

Ingestion: Aspiration hazard. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Exposure may cause anemia and other blood abnormalities. May cause effects similar to those of acute inhalation.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. Irritation may lead to chemical pneumonitis and pulmonary edema. May cause vomiting, diarrhea, hemorrhage, labored breathing, weakness, unsteady gait, and coma. Causes irritation of the mucous membrane.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis. May cause liver and kidney damage. May cause reproductive and fetal effects. Effects may be delayed. May cause conjunctivitis and/or corneal burns. Chronic inhalation may cause chemical pneumonitis, pulmonary edema, mucosal hemorrhage and death due to respiratory arrest. May cause hyperplasia of the bone and spleen.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Possible aspiration hazard.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Firefighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable Liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May be ignited by heat, sparks, and flame. Containers may explode when heated.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Water may be ineffective. This material is lighter than water and insoluble in water. The fire could easily be spread by the use of water in an area where the water cannot be contained. Do NOT use straight streams of water. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation. Use water spray to reduce vapors, do not put water directly on leak, spill area or inside container.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Xylenes (o-, m-, p-isomers)	100 ppm; 150 ppm STEL	100 ppm TWA; 435 mg/m ³ TWA 900 ppm IDLH	100 ppm TWA; 435 mg/m ³ TWA

OSHA Vacated PELs: Xylenes (o-, m-, p- isomers): 100 ppm TWA; 435 mg/m³ TWA

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Appearance: colorless liquid

Odor: aromatic odor

pH: Not available.

Vapor Pressure: 7.99 mm Hg @ 25 C

Vapor Density: 3.66
Evaporation Rate: 0.6
Viscosity: 0.6 MPA 20.00 d
Boiling Point: 140 deg C @ 760.00mm Hg
Freezing/Melting Point: -50 deg C
Decomposition Temperature: Not available.
Autoignition Temperature: 460 deg C (860.00 deg F)
Flash Point: 37.8 deg C (100.04 deg F)
NFPA Rating: (estimated) Health: 2; Flammability: 3; Reactivity: 0
Explosion Limits, Lower: 1.10 vol %
Upper: 7.00 vol %
Solubility: Insoluble.
Specific Gravity/Density: .8620g/cm3
Molecular Formula: C8H10
Molecular Weight: 106.17

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: High temperatures, incompatible materials, ignition sources, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, Attacks some forms of plastics, rubbers, and coatings., 1,3-Dichloro-5,5-dimethyl-2,4-imidazolidindione (dichlorohydrantoin).

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 1330-20-7: ZE2100000

LD50/LC50:

CAS# 1330-20-7:

Inhalation, rat: LC50 = 5000 ppm/4H;

Oral, rat: LD50 = 4300 mg/kg;

Carcinogenicity:

CAS# 1330-20-7:

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 3 carcinogen

Epidemiology: No information available.

Teratogenicity: Specific Developmental Abnormalities - Musculoskeletal system: Inhalation, rat: TCLo = 250 mg/m3/24H (female 7-15 days after conception).; Fertility - Post-implantation mortality: Inhalation, rat: TCLo = 50 mg/m3/6H (female 1-21 days after conception).; Effects on Newborn - Growth statistics: Inhalation, mouse: TCLo = 4000 ppm/6H (female 6-12 days after conception).

Reproductive Effects: Fertility - Abortion: Inhalation, rabbit: TCLo = 1 gm/m3/24H (female 7-20 days after conception).

Neurotoxicity: No information available.

Mutagenicity: No information available.

Other Studies: Vapor causes sensation of irritation of the eyes in some individuals at 200 ppm in

air (Toxicology of the Eye). Standard Draize Test: Administration onto the skin (rabbit) = 500 mg/24H (Moderate). Standard Draize Test: Administration into the eye (rabbit) = 5 mg/24H (Severe).

Section 12 - Ecological Information

Ecotoxicity: Cas#1330-20-7:LC50(96Hr.) rainbow trout = 8.05 mg/L, Static condition;LC50 (96Hr.) fathead minnow = 16.1 mg/L, flow-through conditions; LC50(96Hr.) bluegill = 16.1 mg/L, flow-through;EC50 (48 Hr.) water flea = 3.82 mg/L, flow-through conditions;EC50(24 Hr.) photobacterium phosphoreum = 0.0084 mg/L, Microtox test.

Environmental Fate: In air, xylenes exist primarily in the vapor phase and degrade by reacting with photochemically produced hydroxyl radicals with a half-life of 1-2 days. Based upon estimated Koc values this product is suggested to show moderate to high soil mobility and may leach into groundwater. Little bioconcentration is expected. Xylene will exhibit low bioconcentration in aquatic organisms but may adsorb somewhat to sediments or particulate matter in water. BCF value = 20 (measured in eels).

Physical/Chemical: ATMOSPHERIC FATE: According to a model of gas/particle partitioning of semivolatile organic compounds in the atmosphere, xylene, which has an experimental vapor pressure of 7.99 mm Hg at 25 deg C, will exist solely as a vapor in the ambient atmosphere. Vapor-phase xylene is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the atmospheric lifetime of xylene is about 1-2 days. Ambient levels of xylene are detected in the atmosphere due to large emissions of this compound.

Other: Biodegradable.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: CAS# 1330-20-7: waste number U239; (Ignitable waste, Toxic waste).

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	XYLENES				XYLENES
Hazard Class:	3				3(9.2)
UN Number:	UN1307				UN1307
Packing Group:	III				III
Additional Info:					FLASHPOINT 27 C

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 1330-20-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA**Section 302 (RQ)**

CAS# 1330-20-7: final RQ = 100 pounds (45.4 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 1330-20-7: acute, chronic, flammable.

Section 313

This material contains Xylenes (o-, m-, p- isomers) (CAS# 1330-20-7, 96 0%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 1330-20-7 is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 1330-20-7 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 1330-20-7 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

XN F

Risk Phrases:

R 10 Flammable. R 20/21 Harmful by inhalation and in contact with skin. R 38 Irritating to skin.

Safety Phrases:

S 25 Avoid contact with eyes.

WGK (Water Danger/Protection)

CAS# 1330-20-7: 2

Canada

CAS# 1330-20-7 is listed on Canada's DSL/NDSL List.

This product has a WHMIS classification of B2, D2A.

CAS# 1330-20-7 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 1330-20-7: OEL-ARAB Republic of Egypt:TWA 0.5 ppm (0.9 mg/m3)

OEL-AUSTRALIA:TWA 80 ppm (330 mg/m3);STEL 150 ppm (655 mg/m3) OEL-BEL

GIUM:TWA 100 ppm (434 mg/m3);STEL 150 ppm (651 mg/m3) OEL-CZECHOSLOVA

KIA:TWA 200 mg/m3;STEL 1000 mg/m3 OEL-DENMARK:TWA 50 ppm (217 mg/m3);

Skin OEL-FINLAND:TWA 100 ppm (435 mg/m3);STEL 150 ppm;Skin OEL-FRANC

E:TWA 100 ppm (435 mg/m3);STEL 150 ppm (650 mg/m3) OEL-GERMANY:TWA 10

0 ppm (440 mg/m3) OEL-HUNGARY:TWA 100 mg/m3;STEL 300 mg/m3 OEL-JAPAN

:TWA 100 ppm (430 mg/m³) OEL-THE NETHERLANDS:TWA 100 ppm (435 mg/m³);
Skin OEL-THE PHILIPPINES:TWA 0.1 mg/m³ OEL-POLAND:TWA 100 mg/m³ OEL
-SWEDEN:TWA 50 ppm (200 mg/m³);STEL 100 ppm (450 mg/m³);Skin OEL-SWIT
ZERLAND:TWA 100 ppm (436 mg/m³);STEL 200 ppm (870 mg/m³) OEL-THAILAND
:TWA 100 ppm (435 mg/m³) OEL-TURKEY:TWA 100 ppm (435 mg/m³) OEL-UNIT
ED KINGDOM:TWA 100 ppm (435 mg/m³);STEL 150 ppm;Skin OEL IN BULGARIA,
COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPOR
E, VIETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 6/22/1999

Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.