Safety Data Sheet

Xylene

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Xylene

1.2 Other means of identification

XYLOL

1.3 Recommended use of the chemical and restrictions on use

For laboratory and manufacturing use only.

1.4 Supplier's details

Name	High Purity Products
Address	14546 N. Lombard Street Portland OR 97203 United States of America
Telephone	503-227-1616
email	help.desk@highpp.com

1.5 Emergency phone number

CHEMTREC: 1-800-424-9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Flammable Liquid, Cat. 3
- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, dermal, Cat. 4
- Skin irritation, Cat. 2
- Carcinogenicity, Cat. 2
- Specific target organ toxicity, repeated exposure, Cat. 2
- Aspiration hazard, Cat. 1

- Hazardous to the aquatic environment, long-term hazard, Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram

Signal word **Danger**

Hazard statement(s)target

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H315	Causes skin irritation.
H413	May cause long lasting harmful effects to aquatic life.
H373	May causes damage to organs through prolonged or repeated exposure.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P243	Take action to prevent static discharges.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
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 [or shower].
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

SECTION 3: Composition/information on ingredients

3.1 Substance

Constituents	CAS Number	Concentration (Weight)
Xylenes (o-, m-, p- isomers)	1330-20-7	80 – 90%
Ethyl Benzene	100-41-4	10-19%
Toluene	108-88-3	0 – 0.5%
Benzene	71-43-2	0 – 0.01%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

In case of eye contact	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persist, contact a physician.
In case of skin contact	Remove contaminated clothing/shoes. Wipe off excess material from exposed area. Flush with large amounts of water for at least 15 minutes, by the clock, and follow by washing with soap, if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment. Do not reuse clothing until cleaned.
If swallowed	If swallowed, DO NOT INDUCE vomiting. If conscious, have victim rinse mouth out with water, then drink sips of water to remove taste from mouth. DO NOT GIVE LIQUIDS TO A DROWSY, CONVULSING OR UNCONSCIOUS PERSON. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Transport to nearest medical facility for additional treatment.
If inhaled	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Use water fog, "alcohol" foam, dry chemical, or C02. Do not use a direct stream of water. Material will float and can be re-ignited on surface of water.

5.2 Specific hazards arising from the chemical
When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

5.3 Special protective actions for fire-fighters
WARNING! Combustible Liquid. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water.

SECTION 6: Accidental release measures

6.1 General Procedures:
WARNING. Combustible. Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.

SECTION 7: Handling and storage

7.1 General procedures:
Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

7.2 Precautions for safe handling:
Avoid contact with skin and eyes. Do not inhale vapors. Keep away from heat and open flame. Wash thoroughly with soap and water after handling. Store tightly closed containers in cool, dry place.

Comments:
KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition; they may explode and cause injury or death. Observe all federal, state, and local

regulations and National Fire Protection Association (NFPA) Codes with pertain to the specific local conditions of stage and use, including OSHA 29 CFR 1910.106 and NFPA 30, 70, 77, and 497.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Constituents	CAS Number	NIOSH REL (TWA)
Xylenes (o-, m-, p- isomers)	1330-20-7	100 ppm
Ethyl Benzene	100-41-4	100 ppm
Toluene	108-88-3	100 ppm
Benzene	71-43-2	0.1 ppm

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

Pictograms

Personal Protective Equipment

Eyes and Face: Use chemical safety goggles and full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

Skin: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory: If exposure may or does exceed occupational exposure limits use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

Other use precautions: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Liquid
Appearance	Clear Liquid
Color	Clear, white-water
Odor	Aromatic sweet odor
Odor threshold	No data available.
pH	N/A
Melting point/freezing point	-54°F
Boiling point or initial boiling point and boiling range	277-293°F
Flash point	81°F
Evaporation rate	0.7 (n-Butyl Acetate=1)
Lower explosion limit / flammability limit	0.01%
Upper explosion limit / flammability limit	0.07%
Vapor Pressure	33.75 mmHg at 20°C
Relative vapor density	No data available.
Density and/or relative density	0.87
Solubility	negligible solubility with water

Auto-ignition temperature	810-986° F
Decomposition temperature	No data available.
Kinematic viscosity	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
None under normal use conditions.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid
Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

10.5 Incompatible materials
Oxidizing materials

10.6 Hazardous decomposition products
Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

SECTION 11: Toxicological information

Information on toxicological effects

Acute Toxicity
Xylene:
LC50 – inhalation - rat - 5,000 ppm/4H

Ethyl Benzene:
LD50 – oral – rat – 3500 mg/kg
LC50 – inhalation – mouse – 50,000 mg/m3/2H

Toluene:
LC50 – inhalation – rat - 8000 ppm/4H
LD50 – oral – rat – 636 mg/kg

Benzene:
LD50 – oral – rat – 930 mg/kg
LC50 – inhalation – rat – 10,000 ppm/7H

Skin corrosion/irritation
May cause skin irritation.

Serious eye damage/irritation
Causes serious eye irritation.

Germ cell mutagenicity
No data available.

Carcinogenicity
Xylene: Group D: Not Classifiable as to Human Carcinogenicity

Reproductive toxicity
ACGIH Carcinogen - Not Classifiable.

STOT-single exposure
Developmental (effects during periods when organs are developing) , Hepatic (Liver), Neurological (Nervous System), Renal (Urinary System or Kidneys)

STOT-repeated exposure
No data available.

Aspiration hazard
Pulmonary aspiration of toxic vomitus or ingested liquid xylene may cause inflammation of the lungs.

SECTION 12: Ecological information

Toxicity
Xylene:
EC50; Species: Chlorococcales (Green algae); Conditions: freshwater, static; Concentration: 100000 ug/L for 24 hr; Effect: physiology, assimilation efficiency /formulated product
EC50; Species: Chlorococcales (Green algae); Conditions: freshwater, static; Concentration: 100000 ug/L for 24 hr; Effect: physiology, assimilation efficiency /formulated product/

Persistence and degradability
Xylenes biodegrade in soil and water under both aerobic and anaerobic conditions. Biodegradation is an important fate process under acclimated conditions and in subsurface soils and groundwater where volatilization is hindered. Xylenes are expected to biodegrade in soil.

Bioaccumulative potential
A BCF range of 14-15 was measured in goldfish for the three xylene isomers. Rainbow trout (Oncorhynchus mykiss) exposed to xylenes (emulsified in aquatic weed control) for 56 days in a flow-through system had a maximum BCF of 25.9. According to a classification scheme, these BCF values suggests that bioconcentration in aquatic organisms is low(SRC).

Mobility in soil
xylenes are expected to have high to moderate mobility in soil.

SECTION 13: Disposal considerations

Product disposal
Product disposal Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container or residue.

SECTION 14: Transport information

DOT (US)
UN Number: UN1307
Class: 3
Packing Group: III
Proper Shipping Name: Xylenes
Reportable Quantity: 100 lbs

IMDG
UN Number: UN1307

Class: 3
Packing Group: III
Proper Shipping Name: Xylenes

IATA
UN Number: UN1307
Class: 3
Packing Group: III
Proper Shipping Name: Xylenes

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components
Chemical name: Xylene (mixed isomers)
CAS number: 1330-20-7
Chemical name: Ethylbenzene
CAS number: 100-41-4
Chemical name: Toluene
CAS number: 108-88-3
Chemical name: Benzene
CAS number: 71-43-2

New Jersey Right To Know Components
Common name: XYLENES
CAS number: 1330-20-7
Common name: ETHYL BENZENE
CAS number: 100-41-4
Chemical name: Toluene
CAS number: 108-88-3
Chemical name: Benzene
CAS number: 71-43-2

Pennsylvania Right To Know Components
Common name: XYLENES
CAS number: 1330-20-7
Common name: ETHYL BENZENE
CAS number: 100-41-4
Chemical name: Toluene
CAS number: 108-88-3
Chemical name: Benzene
CAS number: 71-43-2

Canadian Domestic Substances List (DSL)
Common name: XYLENES
CAS number: 1330-20-7
Common name: ETHYL BENZENE
CAS number: 100-41-4
Chemical name: Toluene
CAS number: 108-88-3
Chemical name: Benzene
CAS number: 71-43-2

California Prop. 65 Components
WARNING: this product contains a chemical known in the State of California to cause cancer.
Ingredients: ethylbenzene

California Prop. 65 components
Chemical name: ETHYLBENZENE
CAS number: 100-41-4
06/11/2004 - Cancer

Massachusetts Right To Know Components

New Jersey Right To Know Components

California Prop. 65 components
Chemical name: Toluene
CAS number: 108-88-3
01/01/1991 - Developmental toxicity
08/07/2009 - Female reproductive toxicity (de-listed 03/07/2014)
01/01/1991 - developmental
08/07/2009 - female

California Prop. 65 components
Chemical name: Benzene
CAS number: 71-43-2
02/27/1987 - Cancer
12/26/1997 - Developmental toxicity
12/26/1997 - Male reproductive toxicity
12/26/1997 - developmental, male

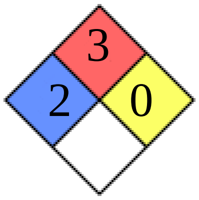
CERCLA RQ Hazardous Substances
Xylene (mixed isomers): 100 lbs
Ethyl Benzene: 1,000 lbs
Toluene: 1,000 lbs
Benzene: 10 lbs

EPCRA Section 313 Toxic chemicals
Xylene (mixed isomers)
Ethyl Benzene
Toluene
Benzene

HMIS Rating

Xylene	
HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

NFPA Rating



SECTION 16: Other information

Disclaimer:

****

High Purity Products provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. High Purity Products MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, High Purity Products WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

****