

Safety Data Sheet

Xylene

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Xylene

Synonyms/Generic Names: Mixed xylenes (o-, m-, p- isomers)

Product Number: 0606

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Flammable liquid, Carcinogen, Target organ effect, Harmful by skin absorption, Irritant

Target Organs: Liver, Kidneys, Blood, Eyes, Ears, Heart, Bone marrow, Central nervous system

Signal Word: Danger

Pictograms:



GHS Classification:

Flammable liquids	Category 3
Skin irritation	Category 2
Serious eye damage/ eye irritation	Category 2A
Carcinogenicity	Category 2
Toxic to reproduction	Category 2

GHS Label Elements, including precautionary statements:

Hazard Statements:

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H312	Harmful in contact with skin.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.

Precautionary Statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/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 precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P332+P337+P313	If skin or eye irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use appropriate media to extinguish.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	Causes eye severe damage.
Inhalation	Causes respiratory tract irritation. Suspected of causing cancer if inhaled.
Skin	Harmful in contact with skin. Causes skin irritation.
Ingestion	May be harmful if swallowed and enters airways.

NFPA Ratings

Health	2
Flammability	3
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	3
Fire	3
Reactivity	0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Xylenes	60-100	1330-20-7	215-535-7	C ₈ H ₁₀	106.17 g/mol
Ethylbenzene	0-30	100-41-4	202-849-4	C ₈ H ₁₀	106.17 g/mol
Toluene	0-1	108-88-3	203-625-9	C ₇ H ₈	92.14 g/mol

4. FIRST-AID MEASURES

Eyes	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention.
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention. If necessary, call a poison center or physician.
Skin	Wash skin thoroughly with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Do not induce vomiting! Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Aspiration hazard if swallowed. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give liquid to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Use: Carbon dioxide or dry powder. Foam Inert gas. Water fog. Do not use water jet as an extinguisher, as this will spread the fire. Avoid water in straight hose streams; will scatter and spread fire.
Special protective equipment and precautions for firefighters	Vapors are heavier than air and may spread near ground to sources of ignition. Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	All equipment used when handling the product must be grounded. Eliminate sources of ignition. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Flammable/Combustible-Keep away from oxidizers, heat and flames. See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Ventilation and appropriate grounding of containers.

Component	Exposure Limits	Basis	Entity
Xylene	100 ppm 434 mg/m ³	TLV	ACGIH
	150 ppm 651 mg/m ³	STEL	ACGIH
	100 ppm 435 mg/m ³	PEL	OSHA
	100 ppm 435 mg/m ³	REL	NIOSH
	150 ppm 655 mg/m ³	STEL	NIOSH
Ethylbenzene	100 ppm 434 mg/m ³	TLV	ACGIH
	125 ppm 543 mg/m ³	STEL	ACGIH
	100 ppm 435 mg/m ³	PEL	OSHA
	100 ppm 435 mg/m ³	REL	NIOSH
	125 ppm 454 mg/m ³	STEL	NIOSH
Toluene	20 ppm	TWA	ACGIH
	150 ppm 560 mg/m ³	STEL	NIOSH
	100 ppm 375 mg/m ³	REL	NIOSH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses or goggles with face shield if splashing is likely to occur.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear chemical resistant gloves, apron or lab coat.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid.
Odor	Sweet, pungent aromatic hydrocarbon odor.
Odor threshold	Not Available
pH	Not Available

Melting point/freezing point	-48 °C (-54 °F)
Initial boiling point and boiling range	138 °C (280 °F)
Flash point	Closed Cup: 27 °C (81 °F)
Evaporation rate	0.8 (n-Butyl Acetate = 1)
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limit	Lower: 0.9% Upper: 7%
Vapor pressure	0.7 kPa (20 °C)
Vapor density	3.7 (Air = 1)
Density	0.86-0.87 (Water = 1)
Solubility (ies) in water	0.146 – 0.191 g/l (25C) slightly soluble
Partition coefficient: n-octanol/water	3.12 - 3.2
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal storage conditions.
Possibility of Hazardous Reactions	Stable
Conditions to Avoid	Heat, flames, sparks and high pressure
Incompatible Materials	Strong acids. Strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Xylenes

Skin	Not Available
Eyes	Not Available
Respiratory	LC50 Inhalation – Rat – 5000 ppm– 4hr LC50 Inhalation – Rat – 6700 ppm – 4hr
Ingestion	LD50 Oral – Rat – 4300 mg/kg LD50 Oral – Rat – 4300 mg/kg LD50 Oral – Mouse – 2199 mg/kg

Ethylbenzene

Skin	LD50 Dermal – Rabbit - >5000 mg/kg
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral – Rat – 3500 mg/kg

Carcinogenicity

IARC	2B: Possibly carcinogenic to humans (Ethylbenzene).
ACGIH	A3: Animal carcinogen (Ethylbenzene).
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Irritation, redness.
Eyes	Irritation, redness, watering eyes, itchiness.

Respiratory	Headache, weakness, memory loss, irritability, dizziness, giddiness, loss of coordination and judgment, respiratory depression/arrest or difficulty breathing.
Ingestion	Abdominal pain, vomiting, and nausea.

Chronic Toxicity	May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Suspected of causing cancer if inhaled. Risk of cancer depends on duration and level of exposure.
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Xylenes

Aquatic Vertebrate	Acute LC50 – 14.9 - 20.3 mg/l (Bluegill (<i>Lepomis macrochirus</i>) - 24 hours)
Aquatic Invertebrate	Acute LC50 >100 - <1,000 mg/l (Water flea (<i>Daphnia magna</i>) - 24 hours)
Terrestrial/Algae	Not Available

Ethylbenzene

Aquatic Vertebrate	Acute LC50 – 11 – 18 mg/l (Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) - 96 hours)
Aquatic Invertebrate	Acute LC50 - >5.2 mg/l (Opossum shrimp (<i>Americamysis bahia</i>) - 48 hours)
Terrestrial/Algae	Not Available

Toluene

Aquatic Vertebrate	Acute LC50 – 1,340 mg/l (Western mosquitofish (<i>Gambusia affinis</i>)- 24hours)
Aquatic Invertebrate	Acute EC50 - <9.83 mg/l (Water flea (<i>Daphnia magna</i>) - 48 hours)
Terrestrial/Algae	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Bioconcentration Factor (BCF) : The product is not bioaccumulating. Partition Coefficient n-octanol / water (log K _{ow}): Log K _{ow} : 3.12 – 3.2
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Product or Residues	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 or residue.
Product Containers	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.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1307, Xylenes, 3, pg III
TDG	UN1307, XYLENES, 3, PG III
IMDG	UN1307, XYLENES, 3, PG III
Marine Pollutant	No
IATA/ICAO	UN1307, Xylenes, 3, pg III

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Listed: Ethylbenzene
SARA 302	Not Listed
SARA 304	Listed: Xylene, Ethylbenzene, Toluene
SARA 311	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 313	Listed: Xylene, Ethylbenzene, Toluene
WHMIS Canada	Class B2: Flammable and combustible liquid- Flammable liquid Class D2A: Poisonous and infectious material- Other effects- Very toxic Class D2B: Poisonous and infectious material- Other effects- Toxic

16. OTHER INFORMATION

Revision	Date
Original	02/03/2020

Disclaimer: The information provided in this Safety Data Sheet ("SDS") is correct to the best of our knowledge, information and belief at the date of publication. The information in this SDS relates only to the specific Product identified under Section 1, and does not relate to its use in combination with other materials or products, or its use as to any particular process. Those handling, storing or using the Product should satisfy themselves that they have current information regarding the particular way the Product is handled, stored or used and that the same is done in accordance with federal, state and local law. WE DO NOT MAKE ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE. WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, INJURY, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT.