TECHNICAL DATA SHEET

Xylene

Revised: 04/27/2026

PRODUCT IDENTIFICATION

Product Name: Xylene
CAS Number: 1330-20-7
Molecular Formula: C_8H_{10}
Molecular Weight: 106.17 g/mol
Grade: Technical
Purity / Concentration: Not Available
Synonyms: Dimethylbenzene, Xylol

PRODUCT OVERVIEW

Xylene (CAS 1330-20-7) is a high-purity technical grade aromatic solvent characterized by its clear, volatile liquid form and 99.1% assay. With a low moisture content of 0.01% and minimal trace impurities, this chemical is essential for high-performance industrial applications requiring precise solvency.

Grade Significance: Technical grade Xylene offers a balance of high purity and cost-effectiveness, ensuring consistent performance for industrial processes where laboratory-grade refinement is not required.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	99.1	98.5	—	GC-FID
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.867	0.865	0.87	USP <841>
Residue After Ignition	%	0.0005	—	0.0020	Gravimetric
Water Content	%	0.01	—	0.05	Karl Fischer Titration
Heavy Metals (as Pb)	ppm	0.05	—	1	ICP-OES
Iron (Fe)	ppm	0.02	—	0.2	ICP-OES
Chloride (Cl^-)	ppm	0.1	—	1	Ion Chromatography
Substances Darkened By Sulfuric Acid	Pass/Fail	Pass	—	—	Visual
Sulfur Compounds As S	ppm	1	—	30	ASTM D3961

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless, volatile aromatic liquid	**Odor**	Sweet, aromatic odor
Form	Liquid	**Boiling Point**	138°C (280.4°F)
Melting / Freezing Point	-47°C (-52.6°F)	**Flash Point**	25°C (77°F)
Specific Gravity	0.865	**Solubility**	Low water solubility, excellent organic solvent
Molecular Formula	C_8H_{10}	**Molecular Weight**	106.17 g/mol
Vapor Pressure (20°C)	6.7 mmHg	**Viscosity (25°C)**	0.89 cP
Refractive Index (20°C)	1.496	**Density (25°C)**	0.865 g/mL

APPLICATIONS

1. **Paints and Coatings** — Functions as a high-performance solvent that enhances the flow and leveling properties of industrial coatings.
2. **Chemical Manufacturing** — Acts as a vital chemical precursor for the synthesis of plastics, resins, and synthetic fibers.
3. **Pharmaceuticals** — Used as a specialized solvent for the extraction and purification of active pharmaceutical ingredients from organic plant materials.
4. **Analytical Chemistry** — Employed as a reliable solvent in high-performance liquid chromatography for the accurate separation of complex chemical compounds.

STORAGE & HANDLING

Proper storage is critical because Xylene is a flammable liquid with a flash point of 25°C, requiring a cool, well-ventilated area away from ignition sources to prevent vapor accumulation. Maintaining a sealed, airtight container prevents contamination and limits the risk of harmful inhalation or skin exposure.

- Store in a cool, well-ventilated area away from heat sources.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong oxidizing agents and acids.
- Ensure proper PPE, including gloves and goggles, are worn during handling.
- Keep away from open flames and sources of ignition.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 55 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Danger

Hazard Statements:

- H226: Flammable liquid and vapor
- H304: May be fatal if swallowed and enters airways
- H312: Harmful in contact with skin
- H315: Causes skin irritation
- H319: Causes serious eye irritation
- H332: Harmful if inhaled
- H335: May cause respiratory irritation
- H373: May cause damage to organs through prolonged or repeated exposure

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com