

PRODUCT IDENTIFICATION



Product Name: Xylene ACS Grade
CAS Number: 1330-20-7
Molecular Formula: C₈H₁₀
Molecular Weight: 106.16 g/mol
Grade: ACS Grade
Purity / Concentration: 98.5%
Synonyms: Dimethylbenzene, Xylol

PRODUCT OVERVIEW

Alliance Chemical offers high-purity Xylene, ACS Grade, which meets rigorous standards for analytical and industrial applications. With a 99% assay and extremely low residue at 6 ppm, this solvent provides the consistency required for precise chemical processes.

Grade Significance: ACS Grade signifies that the chemical meets the stringent purity standards established by the American Chemical Society, ensuring it is suitable for use in laboratory and analytical environments where quality control is paramount.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Fid	%	99	98.5	100.0	GC-FID
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.8715	0.86	0.9151	Hydrometer @ 20°C
Residue On Evaporation	ppm	6	—	20	Evaporation
Water Karl Fischer	ppm	13	—	100.0	ASTM E203
Distillation Range	°C	138.0	137.0	143.0	ASTM D1078
Sulfur	%	0.0009	—	0.0030	Per specification

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, pale liquid with transparent visual profile	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 ₈ H ₁₀	Molecular Weight	106.16 g/mol
Vapor Pressure (20°C)	6.7 mmHg	Viscosity (25°C)	0.89 cP
Refractive Index (20°C)	1.496	Density (25°C)	0.867 g/mL

APPLICATIONS

1. **Analytical Chemistry** — Functions as a reliable mobile phase component in high-performance liquid chromatography for the separation of complex organic compounds.
2. **Coatings and Adhesives** — Utilized as a high-performance solvent in the formulation of paints and industrial coatings due to its superior solvency profile.
3. **Chemical Manufacturing** — Serves as a critical precursor in the synthetic production of plastics, resins, and various synthetic fibers.
4. **Pharmaceuticals** — Employed in specialized extraction processes to isolate active pharmaceutical ingredients from natural source materials.

STORAGE & HANDLING

Due to its flash point of 25°C, Xylene is a flammable liquid that must be stored in a cool, well-ventilated area away from ignition sources to prevent fire hazards. Proper containment is essential to avoid vapor accumulation, which poses inhalation risks and potential harm if ingested.

- Store in a cool, well-ventilated area away from heat sources and open flames.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong oxidizing agents and acids.
- Ensure proper PPE is worn, including gloves and goggles, when handling the product.
- Keep away from incompatible materials and ensure adequate ventilation in storage areas.

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 vapour
- 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.

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