

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

Xylene is a colorless, flammable liquid with a sweet odor, commonly used as a solvent in various industrial applications. It is a mixture of three isomers: ortho-, meta-, and para-xylene, each with distinct properties that make them suitable for different uses in chemical synthesis and manufacturing.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Fid	%	99	98.5	—	GC-FID
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.8715	0.86	0.9151	Hydrometer @ 25°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** — Commonly used as a mobile phase component in reversed-phase high-performance liquid chromatography for separating organic compounds.
2. **Industrial** — Utilized as a solvent in the formulation of paints, coatings, and adhesives due to its excellent solvency properties.
3. **Chemical Manufacturing** — Serves as a precursor in the synthesis of various chemicals, including plastics, resins, and synthetic fibers.
4. **Pharmaceutical** — Used in the extraction processes for isolating active pharmaceutical ingredients from natural sources.
5. **Maintenance** — Effective in removing grease and oil from machinery and equipment in industrial settings.

STORAGE & HANDLING

- 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 vapor
- H302: Harmful if swallowed
- H319: Causes serious eye irritation

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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