

PRODUCT IDENTIFICATION



Product Name: Glycol Ether EE ACS

CAS Number: 110-80-5

Molecular Formula: C₄H₁₀O₂

Molecular Weight: 90.12 g/mol

Grade: ACS Grade

Purity / Concentration: Not Available

Synonyms: Ethylene Glycol Ether, Glycol Ether EE

PRODUCT OVERVIEW

Glycol Ether EE ACS Grade is a high-purity solvent characterized by its 99% assay and low impurity profile, including a color rating of 4 APHA. This clear, colorless liquid is an essential component for critical laboratory and industrial processes requiring strict chemical consistency.

Grade Significance: ACS Grade signifies that the product meets the rigorous purity standards set by the American Chemical Society, ensuring reliability and reproducibility for sensitive analytical and technical applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	99	99	100.0	GC
Color (APHA)	APHA	4	—	10	APHA
Specific Gravity (20°C)	g/mL	0.9297	0.9277	0.9317	Hydrometer @ 20°C
Residue On Evaporation	ppm	15	—	50	Evaporation
Water Karl Fischer	%	0.06	—	0.2	Karl Fischer
Iron (Fe)	ppm	0.03	—	0.1	ICP-MS
Chlorides As Cl	ppm	0.3	—	1	ICP
Acidity As Acetic	ppm	15	—	50	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Mild, ether-like odor
Form	Liquid	Boiling Point	275 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-94 °F (NTP, 1992)	Flash Point	105 °F (NTP, 1992)
Specific Gravity	0.895	Solubility	Soluble in water, alcohols, and many organic solvents
Molecular Formula	C ₄ H ₁₀ O ₂	Molecular Weight	90.12 g/mol
Vapor Pressure (20°C)	0.5 mmHg	Viscosity (25°C)	1.2 cP
Refractive Index (20°C)	1.426	Density (25°C)	0.925 g/mL
Partition Coefficient (log P)-0.3		Decomposition Temp.	Not applicable

APPLICATIONS

1. **Analytical Chemistry** — Serves as a reliable mobile phase component in reversed-phase high-performance liquid chromatography for precise organic compound separation.
2. **Paints and Coatings** — Utilized as a high-performance solvent in industrial paint formulations due to its superior solvency and consistent evaporation rate.
3. **Industrial Cleaning** — Functions as an effective cleaning agent for the removal of stubborn oils and greases from complex machinery and components.
4. **Chemical Synthesis** — Acts as a versatile chemical intermediate, enabling the synthesis of various specialized compounds in controlled manufacturing environments.

STORAGE & HANDLING

Due to its 105 °F flash point, Glycol Ether EE must be stored in a cool, well-ventilated area away from heat sources and ignition points to mitigate fire risks. Proper sealing is essential to prevent contamination and the buildup of flammable vapors, ensuring both safety and product integrity.

- Store in a cool, dry place away from heat sources and direct sunlight.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong oxidizing agents and acids.
- Ensure proper ventilation when handling to minimize inhalation risks.
- Wear appropriate personal protective equipment (PPE) including gloves and safety goggles.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H226: Flammable liquid and vapour
- H302: Harmful if swallowed
- H331: Toxic if inhaled
- H360FD: May damage fertility. May damage the unborn child.

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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