

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 is a high-purity solvent characterized by a clear, colorless appearance and a 99.3% assay concentration. This ACS grade chemical is specifically engineered for precision applications, featuring exceptionally low impurity levels such as 0.05 ppm of iron and 0.03% water content, making it ideal for high-performance laboratory and industrial use.

Grade Significance: ACS Grade signifies that the product meets the rigorous purity standards set by the American Chemical Society, ensuring it is suitable for demanding laboratory and analytical procedures where trace impurities could compromise results.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	99	99	—	GC
Color (APHA)	APHA	4	—	10	APHA
Specific Gravity (20°C)	g/mL	0.933	—	—	Hydrometer @ 25°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** — Functions as a critical mobile phase component in reversed-phase high-performance liquid chromatography to facilitate the separation of complex organic compounds.
2. **Coatings and Paints** — Utilized as a high-performance solvent due to its excellent solvency properties, ensuring smooth application and consistent finish in industrial coating formulations.
3. **Industrial Cleaning** — Acts as a potent cleaning agent capable of effectively dissolving and removing heavy oils, greases, and residues from industrial equipment.
4. **Chemical Manufacturing** — Serves as a reliable chemical intermediate, facilitating the synthesis of various specialized compounds in complex manufacturing processes.

STORAGE & HANDLING

Proper storage is essential to maintain the high purity of this grade and to manage its flash point of 62°C, which necessitates keeping the container away from heat sources and open flames. Because the substance is harmful if swallowed and causes skin and eye irritation, it must be stored in a cool, well-ventilated area in a tightly sealed container to prevent accidental exposure and contamination.

- 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 vapor [Warning Flammable liquids]
- H302: Harmful if swallowed [Warning Acute toxicity, oral]
- H331: Toxic if inhaled [Danger Acute toxicity, inhalation]
- H360FD: May damage fertility; May damage the unborn child [Danger Reproductive toxicity]

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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