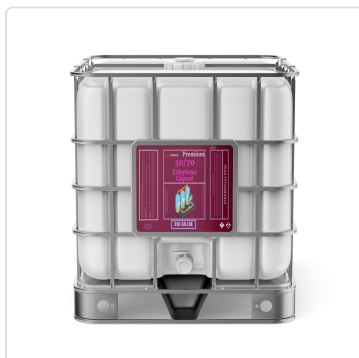


PRODUCT IDENTIFICATION



Product Name: Ethylene Glycol 30/70

CAS Number: 107-21-1

Molecular Formula: C₂H₆O₂

Molecular Weight: 62.07 g/mol

Grade: Technical Grade

Purity / Concentration: 30%

Synonyms: Ethylene Glycol Solution, Ethylene Glycol Blend

PRODUCT OVERVIEW

Alliance Chemical offers a high-quality 30/70 Ethylene Glycol solution, a Technical Grade fluid featuring an assay of 99.2% and low impurity levels. This versatile liquid is primarily engineered for use as a reliable heat transfer medium and antifreeze agent in demanding industrial systems.

Grade Significance: Technical Grade ensures that the product meets specific industrial performance standards while remaining cost-effective for large-scale applications where USP or food-grade purity is not required.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	99.2	98	—	Gas Chromatography
Color (APHA)	APHA	5	—	15	ASTM D1209
Specific Gravity (20°C)	g/mL	1.114	1.113	1.116	ASTM D4052
Water Content	%	0.05	—	0.1	ASTM E203
Iron (Fe)	ppm	0.05	—	0.5	ICP-OES
Chloride (Cl ⁻)	ppm	0.1	—	1	Ion Chromatography
Acidity As Acetic Acid	%	0.0010	—	0.0050	Titration
Diethylene Glycol	%	0.2	—	0.5	Gas Chromatography

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless to pale yellow translucent liquid	Odor	Slightly sweet odor
Form	liquid	Boiling Point	197°C (386.6°F)
Melting / Freezing Point	-13°C (8.6°F)	Flash Point	111°C (231.8°F)
Solubility	Fully miscible with water, moderate organic sol...	Molecular Formula	C ₂ H ₆ O ₂
Molecular Weight	62.07 g/mol	Vapor Pressure (20°C)	0.06 mmHg
Viscosity (25°C)	20.1 cP	Refractive Index (20°C)	1.431
Density (25°C)	1.115 g/mL	Partition Coefficient (log P)	-0.5 to -0.3
Decomposition Temp.	Not applicable (stable under normal handling)		

APPLICATIONS

1. **HVAC** — Functions as a high-performance heat transfer fluid in large-scale heating and ventilation systems to maintain consistent thermal regulation.
2. **Automotive** — Utilized as a primary antifreeze agent to prevent freezing and overheating within vehicle engine cooling loops.
3. **Chemical Manufacturing** — Serves as a stable heat transfer medium for jacketed reactors and complex chemical processing equipment.
4. **Pharmaceuticals** — Acts as a specialized solvent during the synthesis of various pharmaceutical compounds where precise chemical purity is required.

STORAGE & HANDLING

Proper storage is critical to prevent contamination and maintain the integrity of the solution's thermal properties. Because the product is classified as harmful if swallowed, it must be stored in a cool, well-ventilated area with secured containers to prevent accidental ingestion or environmental exposure.

- Store in a cool, dry place away from direct sunlight.
- Use materials compatible with ethylene glycol, such as HDPE or stainless steel.
- Avoid contact with strong oxidizing agents.
- Ensure proper ventilation when handling to minimize inhalation risks.
- Wear appropriate personal protective equipment (PPE) including gloves and 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: Warning



Hazard Statements:

- H302: Harmful if swallowed [Warning Acute toxicity, oral]

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.

Disclaimer: The information contained herein is believed to be accurate and represents the best information currently available to us. However, Alliance Chemical makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.