

PRODUCT IDENTIFICATION



Product Name: Ethylene Glycol 30/70 Technical Grade

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

Our Ethylene Glycol 30/70 Technical Grade is a precision-blended aqueous solution designed for reliable thermal management. With a controlled assay of 29.98% and a low APHA color rating of 5, this product offers consistent performance as an effective heat transfer fluid and antifreeze agent.

Grade Significance: Technical Grade indicates that this product is manufactured for industrial utility rather than human consumption, providing a cost-effective solution that meets rigorous performance standards for mechanical and chemical applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	29.98	99.5	100.5	GC
Color (APHA)	APHA	5	0	10	APHA
pH	—	7	6.8	7.2	pH Meter
Refractive Index 20C	—	1.3777	1.3772	1.3782	Refractometer @ 20°C
Specific Gravity (20°C)	g/mL	1.0431	0.785	0.787	Hydrometer @ 25°C
Non Volatile Residue	mg/100mL	1	0	5	Evaporation
Water Karl Fischer	%	0.02	0	0.05	Karl Fischer

Values based on 1 batch tested. ND = Not Detected.

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** — Used as a high-performance heat transfer fluid in commercial heating and ventilation systems to maintain optimal thermal regulation.
2. **Automotive** — Utilized as a dependable antifreeze agent to prevent freezing and overheating in vehicle cooling systems.
3. **Chemical Manufacturing** — Serves as a stable heat transfer medium in various closed-loop chemical processes requiring precise temperature control.
4. **Pharmaceuticals** — Acts as a specialized solvent in the synthesis of various pharmaceutical compounds where a diluted glycol base is required.

STORAGE & HANDLING

Proper storage is essential to maintain the integrity of the 30% concentration and prevent contamination that could affect heat transfer efficiency. Because this product is harmful if swallowed and poses risks with prolonged exposure, it must be kept in a secure, well-ventilated area away from incompatible substances to ensure worker safety.

- 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
- 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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