

PRODUCT IDENTIFICATION



Product Name: 30% Propylene Glycol Inhibited

CAS Number: 57-55-6

Molecular Formula: C₃H₈O₂

Molecular Weight: 76.09 g/mol

Grade: Inhibited

Purity / Concentration: 30%

Synonyms: Propylene Glycol Inhibited Solution, Inhibited Propylene Glycol 30%

PRODUCT OVERVIEW

Alliance Chemical offers 30% Inhibited Propylene Glycol, a high-purity, clear liquid engineered for reliable thermal performance. With a controlled specific gravity of 1.0302 g/mL and minimal trace impurities, this solution is the industry standard for heat transfer and freeze protection.

Grade Significance: The Inhibited grade is critical because it contains specialized additives that protect metal components from oxidation and corrosion, significantly extending the lifespan of your equipment compared to uninhibited alternatives.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	30	29.5	30.5	GC
Color (APHA)	APHA	3	—	10	APHA
Specific Gravity (20°C)	g/mL	1.0302	1.0252	1.0352	Hydrometer @ 20°C
Heavy Metals As Pb	ppm	≤ 1.5 ppm	—	—	ICP-MS
Iron (Fe)	ppm	≤ 0.15 ppm	—	—	ICP-MS
Chlorides As Cl	ppm	≤ 0.15 ppm	—	—	ICP
Acidity As Acetic	%	≤ 0.001 %	—	—	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Slightly sweet odor
Boiling Point	188°C (371°F)	Melting / Freezing Point	-59°C (-74°F)
Flash Point	104°C (219°F)	Specific Gravity	1.024 (20 °C)
Solubility	Miscible in water and many organic solvents	Molecular Formula	C ₃ H ₈ O ₂
Molecular Weight	76.09 g/mol	Vapor Pressure (20°C)	0.1 mmHg
Viscosity (25°C)	60 cP	Refractive Index (20°C)	1.431
Density (25°C)	1.036 g/mL		

APPLICATIONS

1. **Automotive** — Used in advanced cooling systems to lower the freezing point of engine coolant while preventing internal system degradation.
2. **Industrial Manufacturing** — Functions as a stable heat transfer medium in closed-loop industrial processes, ensuring consistent temperature regulation.
3. **Metalworking** — Provides essential corrosion protection for metal surfaces when integrated into cutting fluids and specialized lubricants.
4. **Food Processing** — Acts as a reliable moisture-retaining agent and humectant, helping to maintain product quality and shelf stability.

STORAGE & HANDLING

Proper storage is essential to maintain the chemical integrity and efficacy of the corrosion inhibitors. Keep the product in a cool, dry, and well-ventilated area to prevent contamination and ensure the solution remains within its specified physical parameters.

- Store in a cool, dry place away from direct sunlight.
- Use materials compatible with polyethylene or stainless steel for storage.
- Avoid contact with strong oxidizing agents.
- Ensure proper ventilation when handling to minimize inhalation exposure.
- Use appropriate personal protective equipment (PPE) such as 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

No GHS pictograms assigned.

Hazard Statements:

- Not Classified
- Reported as not meeting GHS hazard criteria by 6762 of 6899 companies (only 2% companies provided GHS information). For more detailed information, please visit ECHA C&L website.

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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