

PRODUCT IDENTIFICATION



Product Name: 100% Propylene Glycol Inhibited

CAS Number: 57-55-6

Molecular Formula: C₃H₈O₂

Molecular Weight: 76.09 g/mol

Grade: Laboratory

Purity / Concentration: 100%

Synonyms: Propylene Glycol Inhibited, 1,2-Propanediol Inhibited

PRODUCT OVERVIEW

Our 100% Propylene Glycol Inhibited is a high-purity, clear liquid engineered for stability and performance. Featuring a 99.5% assay and minimal impurity levels, it serves as an essential fluid for heat transfer and solvent applications where material longevity is critical.

Grade Significance: The Inhibited grade is specifically formulated with corrosion inhibitors to protect metal surfaces in closed-loop systems, 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	%	100.0	99.5	100.5	GC
Color (APHA)	APHA	3	—	10	APHA
Specific Gravity (20°C)	g/mL	1.036	1.033	1.039	Hydrometer @ 25°C
Water Karl Fischer	%	0.04	0	—	Karl Fischer
Heavy Metals As Pb	ppm	≤ 5 ppm	—	—	ICP-MS
Iron (Fe)	ppm	≤ 0.5 ppm	—	—	ICP-MS
Chlorides As Cl	ppm	ND	—	0.5	ICP
Acidity As Acetic	ppm	10	0	20	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Slightly sweet odor
Form	Liquid	Boiling Point	370.8 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-76 °F (NTP, 1992)	Flash Point	210 °F (NTP, 1992)
Specific Gravity	1.036	Solubility	Fully water soluble
Molecular Formula	C ₃ H ₈ O ₂	Molecular Weight	76.09 g/mol
Vapor Pressure (20°C)	0.1 mmHg	Viscosity (25°C)	58.1 cP
Refractive Index (20°C)	1.431	Density (25°C)	1.036 g/mL
Decomposition Temp.	Not readily decomposed; thermal decomposition above 200°C under ambient conditions		

APPLICATIONS

1. **Automotive** — Used in cooling systems to effectively lower the freezing point of engine coolant while protecting metal components from corrosion.
2. **Paints and Coatings** — Acts as a high-performance solvent that enhances the flow, leveling, and overall application consistency of liquid coatings.
3. **Food and Beverage** — Functions as a reliable humectant that helps retain moisture in various food products, thereby improving texture and extending shelf life.
4. **Cosmetics** — Utilized as an effective carrier to dissolve and stabilize fragrances and active ingredients within personal care formulations.

STORAGE & HANDLING

Proper storage in a cool, dry, and well-ventilated area is essential to maintain the integrity of the chemical and prevent degradation. While not classified as hazardous, keeping containers tightly sealed prevents contamination and ensures the product remains within its strict technical specifications.

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

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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