

PRODUCT IDENTIFICATION



Product Name: 100% Propylene Glycol Inhibited

CAS Number: 57-55-6

Molecular Formula: C₃H₈O₂

Molecular Weight: 76.09 g/mol

Grade: Inhibited

Purity / Concentration: 100%

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

PRODUCT OVERVIEW

100% Propylene Glycol Inhibited is a high-purity, clear liquid engineered for stability and performance. With a controlled assay of 100.0% and minimal impurities like iron and heavy metals, it serves as a reliable heat transfer fluid and chemical solvent.

Grade Significance: The Inhibited grade contains specialized additives that protect metallic components from corrosion, ensuring longer equipment life and reduced maintenance costs for closed-loop systems.

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	1.0361	1.0311	1.0411	Hydrometer @ 20°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 and prevent engine overheating.
2. **Paints and Coatings** — Functions as a solvent that improves the flow, leveling, and overall application consistency of coatings.
3. **Food Processing** — Acts as a humectant to retain essential moisture in food products, which helps improve texture and extend shelf life.
4. **Cosmetics** — Utilized as a carrier and stabilizer to ensure fragrances and active ingredients remain evenly dissolved in formulations.

STORAGE & HANDLING

Proper storage in a cool, dry, and well-ventilated area is essential to maintain the chemical integrity of the product and prevent contamination. While not classified as a severe hazard, keeping containers tightly sealed prevents moisture absorption and maintains its precise physical properties.

- 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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