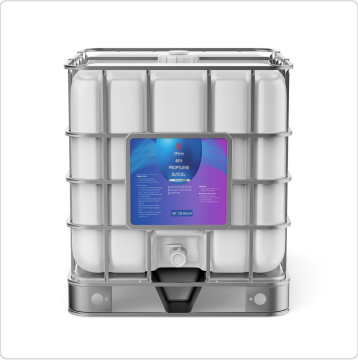
TECHNICAL DATA SHEET

Propylene Glycol 40% – Technical Grade

Revised: 04/27/2026

PRODUCT IDENTIFICATION



Product Name: Propylene Glycol 40% – Technical Grade
CAS Number: 57-55-6
Molecular Formula: $C_3H_8O_2$
Molecular Weight: 76.09 g/mol
Grade: Technical Grade
Purity / Concentration: 40%
Synonyms: Propylene Glycol Solution, Propylene Glycol 40%

PRODUCT OVERVIEW

Propylene Glycol 40% Technical Grade is a versatile, clear, and colorless solution engineered for consistent performance across various industrial applications. With a precise assay of 40.3% and exceptional purity markers like 5 APHA color, this product serves as a reliable solvent and moisture stabilizer for your chemical formulations.

Grade Significance: Technical Grade signifies that this product is manufactured for industrial use where cost-effective, reliable performance is required, rather than for direct human consumption or medical applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	40.3	39	41	Titration
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	1.008	—	—	USP <841>
Water Content	%	0.1	—	0.5	Karl Fischer Titration
Heavy Metals (as Pb)	ppm	0.05	—	1	ICP-MS
Chloride (Cl^-)	ppm	0.1	—	1	Ion Chromatography
Sulfate (SO_4^{2-})	ppm	0.2	—	2	Ion Chromatography
Acidity As Acetic Acid	%	0.0010	—	0.0050	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)	**Solubility**	Miscible with water and many organic solvents
Molecular Formula	$C_3H_8O_2$	**Molecular Weight**	76.09 g/mol
Vapor Pressure (20°C)	0.1 mmHg	**Viscosity (25°C)**	50 cP
Refractive Index (20°C)	1.431	**Density (25°C)**	1.036 g/mL

APPLICATIONS

1. **Food Processing** — Used as a humectant to retain moisture in food products, which helps in maintaining desired texture and extending overall shelf life.
2. **Chemical Manufacturing** — Acts as an effective solvent for a wide range of chemical processes, ensuring stable and uniform ingredient distribution in formulations.
3. **Automotive and HVAC** — Utilized in antifreeze formulations to effectively lower the freezing point of aqueous solutions, protecting systems from cold-weather damage.
4. **Pharmaceuticals** — Serves as a high-quality carrier for active pharmaceutical ingredients, facilitating proper delivery and stabilization in various liquid formulations.

STORAGE & HANDLING

Propylene Glycol should be stored in a cool, dry, and well-ventilated area to maintain its chemical integrity and prevent degradation. While not classified as hazardous, proper storage in sealed containers prevents contamination and ensures the product remains within its specified APHA color and purity limits.

- Store in a cool, dry place away from direct sunlight.
- Use materials compatible with propylene glycol, such as HDPE or stainless steel.
- 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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