

Glycolic Acid

Clear, colorless liquid or crystalline solid

Product Description

Glycolic acid used in cosmetics, cleaning products, and textile processing.

Certificate of Analysis

HSN Code: 2918.19

CAS Number: 79-14-1

Classification: Hazardous (Corrosive / Irritant)

Parameter	Specification	Test Method
Product / Grade	Glycolic Acid — Technical / Cosmetic / Industrial grade	Documentation
Appearance	Clear, colorless to pale yellow liquid / crystals (depending on concentration)	Visual
Odor	Mild, characteristic	Sensory
Assay (as HOCH2COOH)	99.0 – 99.5% (anhydrous) / 70.0 ± 1.0% (aqueous)	Titrimetric
Molecular Weight	76.05 g/mol	Calculation
Density (25 °C)	1.26 – 1.32 g/cm³ (70% solution)	Pycnometer
pH (1% solution, 25 °C)	1.5 – 2.5	pH meter
Boiling Point	~100 °C (70% solution)	ASTM D1078
Melting Point	75 – 80 °C (crystalline form)	Capillary method
Free Acid (as Acetic or Formic)	"d 0.5 %	Titrimetric
Sulphate (as SO ₄ ²⁻)	"d 50 ppm	Ion Chromatography
Chloride (as Cl ⁻)	"d 50 ppm	Argentometric
Heavy Metals (as Pb)	"d 5 ppm	AAS
Iron (Fe)	"d 5 ppm	AAS
Color (APHA / Pt-Co)	"d 30	Photometric
Water Content (for 99% grade)	"d 1.0 %	Karl Fischer
Residue on Ignition	"d 0.1 %	Gravimetric
Purity (GC / HPLC)	"e 99.0 %	Chromatographic
Stability (at 40 °C for 14 days)	No color change / degradation	Observation

Physical Properties

Appearance: Clear, colorless liquid or white crystalline solid depending on form and concentration; free from visible impurities

Odor: Mild, characteristic

Molecular Formula: HOCH_2COOH

Molecular Weight: 76.05 g/mol

Solubility: Freely soluble in water, alcohol, and acetone

Density: 1.26 – 1.32 g/cm³ (70% solution)

Melting Point: 75 – 80 °C (crystalline form)

Packing: 25 kg / 50 kg HDPE drums, 200 kg HDPE drums for bulk liquid grade, 1000 L IBC tanks for industrial supply

Storage: Store in tightly sealed containers in a cool, dry, well-ventilated area away from sunlight and heat. Avoid contact with

Safety & Handling

PPE: Gloves, goggles, and chemical-resistant clothing

Hazards:

- Strong organic acid that can cause irritation or burns on skin and eyes upon contact
- Avoid inhalation of vapors or mists