

PRODUCT IDENTIFICATION



Product Name: 30% Vinegar - Concentrated Industrial Strength

CAS Number: 64-19-7

Molecular Formula: C₂H₄O₂

Molecular Weight: 60.05 g/mol

Grade: Technical

Purity / Concentration: 30%

Synonyms: Acetic Acid 30%, Industrial Vinegar

PRODUCT OVERVIEW

Alliance Chemical offers 30% Concentrated Industrial Strength Vinegar, a high-purity Technical grade acetic acid solution. With a precise 30.1% assay and low impurity levels, including non-detected heavy metals, this clear liquid is engineered for consistent performance in demanding industrial applications.

Grade Significance: Technical grade signifies that the product is manufactured to meet industrial performance standards, providing a balance of high purity and cost-effectiveness for non-pharmaceutical applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	30.1	29	31	Titration with NaOH
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	1.041	1.038	1.044	ASTM D4052
Residue After Ignition	%	0.0010	—	0.0050	USP <281>
Heavy Metals (as Pb)	ppm	ND	—	1	ICP-OES
Iron (Fe)	ppm	0.1	—	1	ICP-OES
Chloride (Cl ⁻)	ppm	1	—	5	ASTM D512
Sulfate (SO ₄ ²⁻)	ppm	2	—	10	ASTM D516

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear colorless liquid	Odor	Pungent, vinegar-like odor
Form	Liquid	Boiling Point	118°C (244.4°F)
Melting / Freezing Point	16°C (60.8°F)	Flash Point	39°C (102.2°F)
Solubility	Fully water soluble	Molecular Formula	C ₂ H ₄ O ₂
Molecular Weight	60.05 g/mol	Vapor Pressure (20°C)	15 mmHg
Viscosity (25°C)	1.2 cP	Refractive Index (20°C)	1.373
Density (25°C)	1.01 g/mL		

APPLICATIONS

1. **Water Treatment** — Utilized as an effective pH adjuster to neutralize alkalinity in various aqueous systems and wastewater processes.
2. **Food Processing** — Functions as a reliable preservative and acidulant, helping to maintain shelf stability and microbial control in food products.
3. **Chemical Manufacturing** — Serves as a versatile solvent and reagent in diverse chemical synthesis pathways and organic manufacturing.
4. **Industrial Cleaning** — Employed in heavy-duty cleaning formulations for its superior ability to dissolve stubborn mineral deposits and scale.

STORAGE & HANDLING

Proper storage is critical because this product is a flammable liquid with a flash point of 39°C and can cause severe skin and eye burns. It must be kept in a cool, well-ventilated area away from heat sources and incompatible materials to prevent hazardous vapor buildup and accidental exposure.

- Store in a cool, dry place away from direct sunlight.
- Use HDPE or glass containers for storage to avoid chemical reactions.
- Ensure proper ventilation when handling to avoid inhalation of vapors.
- Wear appropriate personal protective equipment (PPE) such as gloves and goggles.
- Avoid contact with strong bases and oxidizing agents.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H226: Flammable liquid and vapor [Warning Flammable liquids]
- H314: Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]

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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