

PRODUCT IDENTIFICATION



Product Name: 30% Diluted Acetic Acid Food Grade

CAS Number: 64-19-7

Molecular Formula: $C_2H_4O_2$

Molecular Weight: 60.05 g/mol

Grade: Food Grade

Purity / Concentration: 30%

Synonyms: Vinegar Concentrate, Acetic Acid Solution

PRODUCT OVERVIEW

Our 30% Diluted Acetic Acid is a high-purity, food-grade solution designed for consistent performance in culinary and industrial applications. Featuring a precise 30% concentration and rigorous quality controls, such as a 0.2 ppm lead limit, it ensures safety and reliability in every batch.

Grade Significance: Food Grade certification guarantees that the product meets stringent purity standards and is free from harmful contaminants, ensuring it is safe for direct or indirect contact with food items.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (Titration)	%	30	29.5	30.5	Titration
Color (APHA/Hazen)	APHA	3	—	10	Spectrophotometry
pH	—	2.03	1.93	2.13	pH Meter
Specific Gravity (20°C)	g/mL	1.039	1.037	1.041	Hydrometer @ 20°C
Residue On Evaporation	ppm	15	0	50	Evaporation
Arsenic Antimony As As	ppm	0.5	0	1	ICP-MS
Lead Pb	ppm	0.2	0	0.5	ICP-MS
Chloride Cl	ppm	≤ 0.3 ppm	—	—	ICP
Sulfate So4	ppm	≤ 0.3 ppm	—	—	ICP
Mercury Hg	ppm	0.05	0	0.1	ICP-MS
Sulfite So3	ppm	≤ 0.3 ppm	—	—	ICP

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Pungent, vinegar-like odor
Boiling Point	118-120°C	Flash Point	11°C (52°F)
Specific Gravity	~1.04 (30% aqueous solution, 20 °C)	Solubility	Completely soluble in water
Molecular Formula	$C_2H_4O_2$	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)	1.05 g/mL

APPLICATIONS

1. **Food Production** — Acts as an effective preservative by inhibiting the growth of bacteria and fungi in various food products.
2. **Culinary Manufacturing** — Used as a base in salad dressings, sauces, and marinades to provide a clean, sharp flavor profile.
3. **Food Science** — Utilized to precisely adjust pH and acidity levels in food formulations to achieve optimal taste and shelf stability.
4. **Commercial Sanitation** — Functions as a powerful natural cleaning agent for disinfecting kitchen surfaces and food processing equipment.

STORAGE & HANDLING

Proper storage is critical because this solution is classified as a corrosive substance capable of causing severe skin burns and eye damage. It must be kept in a cool, well-ventilated area away from incompatible materials to maintain chemical integrity and prevent hazardous reactions.

- Store in a cool, dry place away from direct sunlight.
- Use materials compatible with acetic acid, such as HDPE or glass containers.
- Avoid contact with strong oxidizing agents and bases.
- Ensure proper ventilation when handling to minimize inhalation exposure.
- Wear 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: Danger



Hazard Statements:

- H314: Causes severe skin burns and eye damage

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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