

# Ethanol

Clear, colorless liquid alcohol

## Product Description

Industrial ethanol used as a solvent, fuel additive, and in chemical manufacturing.

## Certificate of Analysis

HSN Code: 2207.10

CAS Number: 64-17-5

Classification: Hazardous

| Parameter                | Specification                 | Test Method                |
|--------------------------|-------------------------------|----------------------------|
| Purity (Ethanol)         | "e 99.5% (anhydrous)          | Gas Chromatography (GC)    |
| Water Content            | "d 0.5%                       | Karl Fischer Titration     |
| Methanol                 | "d 0.1%                       | GC / GC-MS                 |
| Acidity (as acetic acid) | "d 0.002%                     | Titration                  |
| Color                    | Clear and colorless           | Visual                     |
| Odor                     | Characteristic alcoholic odor | Sensory / qualitative      |
| Density (20 °C)          | 0.789 – 0.791 g/cm³           | Pycnometer / density meter |
| Refractive Index (20 °C) | 1.361 – 1.363                 | Refractometer              |

## Physical Properties

Appearance: Clear, colorless liquid  
Odor: Characteristic alcoholic odor  
Molecular Formula: C<sub>2</sub>H<sub>5</sub>OH  
Molecular Weight: 46.07 g/mol  
Solubility: Miscible with water and many organic solvents  
Density: 0.789 – 0.791 g/cm³ at 20°C  
Boiling Point: 78.37 °C

Packing: 5 L, 25 L, 30 L HDPE or glass bottles/drums for lab or small volumes, 200 L steel drums (lined) for industrial supply  
Storage: Store in a cool, dry, well-ventilated area away from heat, sparks, open flames, and other ignition sources. Keep container tightly closed.

## Safety & Handling

PPE: Chemical-resistant gloves, goggles, respiratory protection  
Hazards:

- Highly flammable liquid and vapor
- Causes serious eye irritation
- May cause drowsiness or dizziness