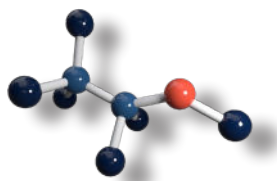


Ethanol



Formula: C₂H₆O

CAS: 64-17-5

Source: Plant fermentation, Distillation, Food extraction and Dehydration

Detection Method: Tiger, Tiger^{LT}, Cub, Falco, TVOC 2, GasClam 2 & GasCheck G

Ethanol, also called alcohol, is a clear, colourless liquid that is used as a principle ingredient in alcoholic beverages, such as beer and wine. Ethanol is a natural byproduct of plant fermentation and can be produced through the hydration of ethylene. Because ethanol can dissolve in water and other organic compounds, it is an ingredient in a range of products.

C₂H₆O - RESULTS IN FEWER GREENHOUSE GAS (GHG) EMISSIONS THAN GASOLINE

Formula & Structure

Ethanol, also commonly referred to as ethyl alcohol, pure alcohol, grain alcohol, and drinking alcohol, is most known as the alcohol present in alcoholic beverages. Ethanol, which can also be abbreviated as EtOH, is a colourless liquid with a slight odour, and it is soluble in water. It is flammable and volatile, so it evaporates easily when left in an open container. Ethanol's chemical formula is C₂H₆O which is made of nine atoms that include two carbon (C) atoms, six hydrogen (H) atoms, and one oxygen (O) atom.

History Of Ethanol

In the 1850s, ethanol was a major lighting fuel. During the Civil War, a liquor tax was placed on ethanol to raise money for the war. The tax increased the price of ethanol so much that it could no longer compete with other fuels such as kerosene. Ethanol production declined sharply because of this tax, and production levels did not begin to recover until the tax was repealed in 1906.

A Valuable Ingredient In Production

Ethanol is a valuable ingredient in the production of:

Alcoholic beverages: Spirits and alcohols. Neutral alcohol is mixed with water, aromas and flavourings to produce the final product.

Food and non-alcoholic beverages: Flavours and aromas. Ethanol is used as a natural product to extract and concentrate flavours and aromas, which are then used by the food & drink industry. No alcohol is contained in the final products.

Chemicals: Paints and thermometers. Ethanol is widely used as a solvent, and you can find it in many household products, such as the de-icer or anti-freeze you use to clear your car windscreen. Increasingly ethanol is used as a renewable alternative to fossil-based chemicals for creating a large range of products, such as bioplastics.

Cosmetics: Ethanol is contained in perfumes, deodorants, and other cosmetics.

Pharmaceutical: Ethanol also has many medical uses, and can be found in products such as medicines, medical wipes and as an antiseptic in most antibacterial hand sanitiser gels.

Ethanol Detection Instruments



Fixed Instruments



Semi-Portable Instruments



Portable Instruments



Personal Instruments

