

Technical Data Sheet

Ethanol

chemical name Ethanol, Ethyl alcohol

chemical formula C₂H₆O

molecular mass 46.07 g/mol

CAS number 64-17-5

EINECS number 200-578-6



boiling point 78°C

Relative density 0.805 - 0.812% v/v

melting range -114.3°C

Definition

Ethanol is of wine origin (grape spirit); it is a short-chain alcohol whose formula is CH₃CH₂OH.

At ambient temperature it is a colourless liquid, clear, with a characteristic odour, volatile (boiling point 78°C), hygroscopic, highly flammable. It is completely soluble in many organic solvents (e.g. chloroform) and in water, with which it forms, in a proportion of approximately 96:4, a minimum azeotrope, which makes it impossible to obtain an ethanol distillation purer than 96. For this reason, “pure alcohol” is defined as 96% ethanol and 4% water approximately. Ethanol (96%) is a mixture comprised of between 95.1 - 96.9% v/v of ethanol and water at 20°C (92.6 - 95.2% m/m).

Produced naturally by the fermentation of sugar, it is the most widespread type of alcohol and is the only alcohol suitable for consumption. It is used to make liqueurs and alcoholic beverages.

The use of ethanol of agricultural origin for consumption is governed by EC Regulations, as set out in European Regulation 110/2008 Annex I points 1 and 2. Due to its effectiveness as an antiseptic, it is used in the Pharmaceutical Industry as a disinfectant and in the Cosmetics Industry in the manufacture of perfumes.

HACCP

Our Company applies the HACCP self-control system to guarantee our products (food additives) comply with the law and with contract specifications and prevent hygienic and health hazards, safeguarding public health.

Synoptic table and inside specifications

Ethanol	Reg. (EC) 110/2208 / Inside specification
Assay	96% vol
Acidity or alkalinity	1.5 g of acetic acid / hL of ethanol 100% vol
Ethers	1.3 g of ethyl acetate / hL of ethanol 100% vol
Aldehydes	0.5 g of acetaldehyde / hL of ethanol 100% vol
Superior alcohols	0.5 g of 2-methyl-1-propanol / hL of ethanol 100% vol
Methanol	30 g / hL of ethanol 100% vol
Residue on evaporation	1.5 g / hL of ethanol 100% vol
Nitrogenous bases	0.1 g of nitrogen / hL of ethanol 100% vol
Furfural	n.r.

Declarations

In the formulation of Ethanol, there are no *Allergens* listed in Annex II to European Regulation 1169/2011, neither by adding nor due to cross-contamination.

In accordance with the European Regulation 1881/2006, there are no *Aflatoxins*, *Dioxins*, *Polycyclic Aromatic Hydrocarbons*. There are not even any *Pesticides*, in accordance with the European Regulation 396/2005.

Ethanol and raw materials used for its production do not contain and do not come from *Genetically Modified Organisms*.

Ethanol does not contain, is not produced and does not come into contact with *substances of animal origin*.

The product is suitable for consumption by *vegans* and *vegetarians*.

Packaging

The final product can be delivered to the end customer via two transport methods. Thus, there are two different packing methods: by IBC or by tank trucks, both designated for the transport of food products and ADR.

Recommended storage conditions

Store in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Superimposing unallowed.