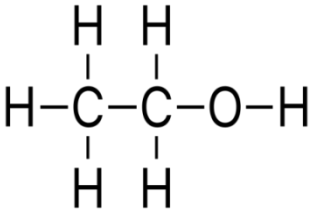
ETHYL ALCOHOL

Ethyl alcohol, also commonly referred to as ethanol, is a colorless liquid that has many uses.

The formula for ethyl alcohol or ethanol is C_2H_5OH or CH_3CH_2OH.

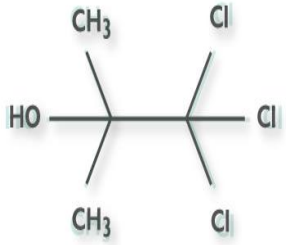


Uses of Ethanol

1. Ethanol is used in alcoholic beverages, solvents, scents, flavorings, coloring, medicines, chemical synthesis, and thermometers.
2. Ethanol is used as a fuel an excellent solvent and an important raw material for making other chemicals. Pure ethanol is toxic liquid; methanol which is even more toxic is sometimes added to it to put off anyone wanting to drink it.
3. A mixture of ethanol and methanol is known as methylated spirits or sometimes 'meth's used in camping stoves.
4. Used as a raw material for making esters which in turn used as solvents in food flavoring, and in the manufacture of cosmetics.
5. Vinegar a weak solution of ethanoic acid is produced from ethanol by a biochemical process. It involves oxidation caused by bacteria called acetobacter.
6. Early medical uses of this alcohol were primarily for pain relief in the form of liquors. This was before the use of anesthesia, and these methods were effective because of alcohol's intoxicating and sometimes numbing effects on the body.
7. In more modern times, ethyl alcohol can be used for its antiseptic properties, and it's often found in antibacterial wipes and hand sanitizers. It is effective at killing most bacteria, fungi, and many viruses on the hands and skin, and it is a useful alternative to hand soaps. Medical professionals often use gel sanitizers before treating patients to prevent the spread of harmful bacteria.
8. Ethyl alcohol can also be used as an antidote to help reverse or lessen the effects of certain chemicals, primarily other alcohols like methanol. Once ethanol is added to the system, it competes with the other alcohols to be broken down by the body, and slows down the metabolism of other chemicals in the bloodstream where they typically become toxic.

CHLORO BUTANOL/CHLORBUTOL

A colourless or white crystals or a white crystalline powder with a characteristic camphoraceous odour. It sublimes readily.



Uses:

1. Chlorobutanol is a well accepted widely used, very effective preservative in many pharmaceuticals and cosmetic products, e.g. injections, ointments, products for eyes, ears and nose, dental preparations, etc.
2. It has antibacterial and antifungal properties and has been used for more than 130 years when it was first manufactured.
3. Chlorobutanol is typically used at a concentration of 0.5 % ,as a preservative in injections, eye drops and mouth washs, salves, creams and ointments as well as cosmetics.
4. Chlorobutanol is manufactured as Hemihydrate and Anhydrous. The anhydrous form is useful in formulations where the absence of water is desired.
5. Chlorobutanol, or chlorbutol, is an alcohol-based preservative with no surfactant activity. It also elicits sedative-hypnotic and weak local anesthetic actions in addition to antibacterial and antifungal properties.
6. Some pet enthusiasts use chlorobutanol mixed with water as a humane method of euthanizing reptiles, as the solution causes death in a matter of minutes.

CETOSTEARYL ALCOHOL

Cetostearyl alcohol (also known as Cetearyl alcohol) is actually a mixture of cetyl (C16) and stearyl alcohols (C18). It comes from the extraction of vegetable oils such as palm oil. It is a white, waxy solid at room temperature. Cetostearyl alcohol is a white, waxy, solid material in the form of flakes. It is oil soluble, but it is not water-soluble

Formula: **$(CH_3(CH_2)_nOH)$**

Uses:

1. Cetostearyl alcohol is a nonionic surfactant and it is a common ingredient in skin care formulations where it can fulfill a variety of functions.
2. It can act as an emulsion stabilizer, a fragrance ingredient, an opacifying agent a surfactant/emulsifying agent, a surfactant/foam booster; and a viscosity increasing agent.

3. It imparts an emollient feel to the skin and can be used in water-in-oil emulsions, oil-in-water emulsions, and anhydrous formulations. It is commonly used in hair conditioners and other hair products.