

## 70910 Mono-Ethylene Glycol

Chemical composition :  $\text{CH}_2\text{OH}-\text{CH}_2\text{OH}$

Oily, sweet tasting, toxic, colorless, hygroscopic liquid. Glycol is readily soluble in alcohol and water, sparingly soluble in ether. Glycol can be prepared by careful oxidation of ethylene.

Glycol is nitrated as a substitute for glycerol, and the nitrate is used in dynamites; it is also used under the proprietary name Glysantin or Genantin as an antifreeze, unmixed for hot cooling of high-performance engines, for lubricating moving parts on refrigeration systems, as an additive to hydraulic brake fluids (prevents rubber from swelling), as a dye solvent.

Since glycol is toxic to a certain degree, it must not be used as a glycerin substitute in the cosmetics and food industries. Glycol and glycerol can be distinguished as follows: 1. iodine sample: glycerol dissolves iodine with reddish brown color. 2. Gentian violet test: Glycerol dissolves gentian violet with blue color.