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Product Information

Ethylene glycol

Product Number **E 9129**

Storage at Room Temperature

Product Description

Molecular Formula: $C_2H_6O_2$

Molecular Weight: 62.07

CAS Number: 107-21-1

Concentration: 17.9 M (neat liquid)

Density: 1.11 g/ml

Ethylene glycol is an colorless, odorless liquid completely miscible with water and many organic solvents. This product is used to markedly reduce the freezing point of water. It is used primarily as an anti-freeze and in the manufacture of polyester fiber and film. Ethylene glycol is also used as a heat-transfer fluid, in aircraft and runway de-icing mixtures, to provide freeze-thaw stabilization to latex coatings, to improve flexibility and drying time of oil-based paints containing alkyd resins, as a dehydrating agent for natural gas, in motor oil additives, and as an additive in the formulation of inks, pesticides, wood stains, adhesives, and other products. It can also be used for the freezing of animal embryos.

This product has a dielectric constant of 38.66 esu (at 20 °C and 150 meters wavelength).¹ The specific heat is 0.561 cal/g °C. The concentration of this product in biological materials can be determined colorimetrically.²

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in water (500 mg/ml).

References

1. The Merck Index, 11th ed., Entry# 3755.
2. Rajagopal, G., et al., A new method for estimation of ethylene glycol in biological material. Anal. Biochem., **65**, 132-136 (1975).

CMH/JRC 11/02

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