**Glycerol**

**Product Number**  G 8773  
Store at Room Temperature

**Product Description**

Molecular Formula:  \( \text{C}_3\text{H}_8\text{O}_3 \)  
Molecular Weight:  92.1  
CAS Number:  56-81-5  
Melting point:  17.8 °C  
Density:  1.26 g/ml  
Synonyms:  glycerin, 1,2,3-propanetriol

This product is designated as Electrophoresis grade and is suitable for use in electrophoresis experiments.

Glycerol is a viscous liquid that is widely used in molecular biology research. Applications include purification of bacteriophage \( \lambda \) particles by step gradients, calcium-phosphate-mediated transfection of eukaryotic cells with plasmid DNA, DEAE-dextran-mediated transfection of DNA into cells, DNA sequencing reactions, and mediation of mispriming in PCR. Glycerol is used in the preparation of DNA and protein samples for both agarose and polyacrylamide gel electrophoresis. At 5-10% concentration, glycerol increases the density of a sample so that the sample will layer at the bottom of a sample well on the electrophoretic gel. Glycerol is also used in casting gradient gels.2

The use of glycerol in improved focusing of alkaline pH protein samples in immobilized pH gradient (IPG) strips has been published.3 Studies of the effect of glycerol on separation of DNA fragments by capillary electrophoresis have been reported.4

Glycerol is used in the long-term stabilization of enzyme solutions and storage of bacterial stocks.2 The specific gravity and freezing point values for various aqueous solutions of glycerol have been reported.1

**Precautions and Disclaimer**

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

**Preparation Instructions**

Glycerol is miscible with water and alcohol at all concentrations1.

**References**

1. The Merck Index, 12th ed., Entry# 4493.  