

### ★ Storage

Store at room temperature

### ✎ Contents

- Product manual
- Glycine  $\geq 99\%$

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### ★ Description

Glycine is a non-chiral amino acid. Glycine is a molecule with pI of 6.7, which is similar to the pH of stacking region in polyacrylamide gels. It has advantage of low mobility, hydrophobicity and it does not associate with proteins.

Glycine is a proteinogenic amino acid that plays a diverse array of roles in biochemistry and physiology. This non-essential, non-polar glucogenic amino acid acts as an inhibitory neurotransmitter in the central nervous system, but also works alongside glutamate as a co-agonist at NMDA receptors. As a precursor, glycine serves as a building block for various macromolecules, playing a crucial role in cellular processes.

Beyond its vital biological functions, glycine demonstrates remarkable versatility in various research applications. Its application as a biochemical reagent makes it invaluable in numerous assays and procedures. Its buffering capacity allows it to play a critical role in protein analysis techniques like SDS-PAGE and Western Blotting, chromatography, and cell culture. Glycine's zwitterionic nature makes it an effective buffer across a range of pH values. In immunology research, it is widely used in the preparation of buffers for Western Blotting and other techniques. Additionally, its compatibility with various enzymes makes it useful in enzymatic assays like lactate determination. Furthermore, glycine contributes to the formulation of buffers for protein stabilization, pH control, and enzymatic reactions.

### ★ Product Specification

CAS NO	56-40-6
Formular	$C_2H_5NO_2$
M.W	75.07
Purity	$\geq 99\%$ (by HPLC)
Impurities	$\leq 0.1$
Loss on Drying	$\leq 0.2$
Solubility	H <sub>2</sub> O : 200mg/ml , Clear, Colorless to faintly yellow