

## ■ L-Serine

### Introduction

Product properties: L-Serine has little sweet taste, 228 °C decomposes, slightly soluble in water, does not dissolve in the ethyl alcohol. It's appearance is white-like crystalline powder.

Functions: Serine plays an important role in the catalytic function of many enzymes. It has been shown to occur in the active sites of chymotrypsin, trypsin, and many other enzymes. The so-called nerve gases and many substances used in insecticides have been shown to act by combining with a residue of serine in the active site of acetylcholine esterase, inhibiting the enzyme completely. The enzyme acetylcholine esterase breaks down the neurotransmitter acetylcholine, which is released at nerve and muscle junctions in order to allow the muscle or organ to relax. The result of acetylcholine inhibition is that acetylcholine builds up and continues to act so that any nerve impulses are continually transmitted and muscle contractions do not stop. As a constituent (residue) of proteins, its side chain can undergo O-linked glycosylation, which may be functionally related to diabetes. It is one of three amino acid residues that are commonly phosphorylated by kinases during cell signaling in eukaryotes. Phosphorylated serine residues are often referred to as phosphoserine. Serine proteases are a common type of protease.

### Ingredient

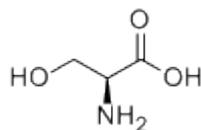
Product Name L-Serine

CAS 56-45-1

MF C3H7NO3

MW 105.59

MS



### Item and Standard

ITEM	UNIT	STANDARD
Appearance		White-like crystalline powder
Identification		Meets the requirements
Specific rotation[A]D20		+14.4 ° ~ +15.5 °
State of solution	%	≥98.0%
Chloride (Cl)	%	≤0.02%
Ammonium (Nh4)	%	≤0.02%
Sulfate (So4)	%	≤0.02%



Iron (Fe)		≤10PPM
Heavy metals(Pb)		≤10PPM
Arsenic (as As <sub>2</sub> O <sub>3</sub> )		≤1PPM
Loss on drying	%	≤0.2%
Residue on ignition(sulfated)	%	≤0.1%
Assay	%	99.0%-101.0%
PH		5.2-6.2

## Application

1. For biochemical reagent and food additive.
2. Nutritional supplement, in cosmetics as skin nutrition additive.
3. Available for biochemical and nutritional research purposes, but also
4. Can be used as synthetic ring serine raw materials.



## Packaging

25KG

## Storage

Please reading safety data sheet before carrying or using the product.  
Cool and dry, keep tightly closed, quality guarantee period is two years.