

## ■ L-Tryptophan

### Introduction

Product properties: L-Tryptophan has the bitter taste, the DL- and the D- type have little sweet taste. 289 °C decomposes, slightly soluble in water, does not dissolve in the ethyl alcohol. Its appearance is white-like crystalline powder. Tryptophan is an  $\alpha$ -amino acid that is used in the biosynthesis of proteins. Tryptophan contains an  $\alpha$ -amino group, an  $\alpha$ -carboxylic acid group, and a side chain indole, making it a non-polar aromatic amino acid. It is essential in humans, meaning the body cannot synthesize it, it must be obtained from the diet.

Functions: Amino acids, including tryptophan, are used as building blocks in protein biosynthesis, and proteins are required to sustain life. Many animals (including humans) cannot synthesize tryptophan: they need to obtain it through their diet, making it an essential amino acid. Tryptophan is among the less common amino acids found in proteins, but it plays important structural or functional roles whenever it occurs. For instance, tryptophan and tyrosine residues play special roles in "anchoring" membrane proteins within the cell membrane.

### Ingredient

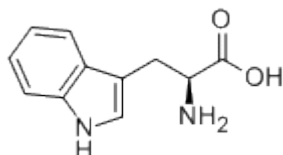
Product Name L-Tryptophan

CAS 73-22-3

MF C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>

MW 204.23

MS



### Item and Standard

ITEM	UNIT	STANDARD
Appearance		White-like crystalline powder
Identification		Meets the requirements
Specific rotation[A] <sub>D</sub> 20		-29.4 ° ~ -32.8 °
Chloride (Cl)	%	≤0.05%
Sulfate (So <sub>4</sub> )	%	≤0.03%
Iron (Fe)	%	≤0.003%
Heavy metals(Pb)		≤15PPM
Arsenic (as As <sub>2</sub> O <sub>3</sub> )		≤1PPM

Loss on drying	%	≤0.3%
Residue on ignition(sulfated)	%	≤0.1%
Assay	%	98.5%-101.0%
PH		5.5-7.0

## Application

1. L-Tryptophan is an important nutrient.
2. L-Tryptophan takes part in the renewal of animal blood plasma protein in the body
3. L-Tryptophan helps nicotinic acid and the synthesis of hemoglobin.
4. L-Tryptophan can promote lactation of cows and sows.
5. L-Tryptophan is used as control agent of pellagra.



## 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.