



**PRODUCT INFO
& DATASHEET**

L-TRYPTOPHAN *min. 98%*

1. PRODUCT DESCRIPTION

English name:	L-Tryptophan
Product name:	L-2-amino-3(β -indole) propionic acid
Chemical formula:	C ₁₁ H ₁₂ N ₂ O
Molecular weight:	134.09
CAS Number:	73-22-3

Product is white or yellowish crystalline powder, odorless or slight smell, bitter taste. It is slightly soluble in water, little soluble in chloroform, insoluble in formic acid, soluble in diluted hydrochloric acid or sodium hydroxide. Melting point: 289 degrees (decomposition). It will be colored if it is put under sunshine for a long time. Heated with water, it will generate a lot of indole, for example, together with sodium hydroxide, copper sulphate, then generate a large quantity of indole. Heated with acid in the dark, it will be more stable. If coexisted with other amino acids, sugars, aldehydes, it will be easily decomposed. Without coexistence of hydrocarbon, heated with Smol/L sodium hydroxide to a total of 125 degrees, it still maintains its stability. In decomposition of protein by acid, the Tryptophan can be completely decomposed, generating rot black substance. Slightly soluble (1.1 g/100 ml, 25?). Soluble in hot water, hot ethanol, diluted hydrochloric acid and alkaline hydroxide solution. It is a kind of essential amino acid.

2. PRODUCT ANALYSIS

Quality up to our analysis standard (Q/AFF08-2009)

Arsenic (calculated in As) :	-29.0° / -33.0°
Contents (on dry basis) %:	≥ 98.0 %
Drying shrinkage:	≤ 0.5 %
Ignition residue	≤ 0.5 %
Heavy metals:	≤ 0.002 %
Chloride:	≤ 0.03 %
Sulphate:	≤ 0.03 %

3. FUNCTIONS AND USE

• NUTRITIONAL SUPPLEMENT

The Tryptophan contained in egg white protein, fish, corn powder is a limiting amino acid, and its content in grains as rice is low. Combined with lysine, egg white acid, threonine, amino acids can be strengthened. By putting 0.02% Tryptophan and 0.1M lysine in corn products, protein titer can be significantly improved.

• ANTIOXIDANT

As a necessary amino acid to human and animal life L-Tryptophan plays an important role in metabolism. It is referred to as the second essential amino acid. It is widely used in medicine, food, feed etc. In living organisms, L-Tryptophan can be compounded to 5-hydroxy tryptamine and other hormones as well as pigments, alkaloids, coenzymes, plant hormones and other physiologically active substances, which can prevent and treat pellagra as well as to eliminate stress, improve the efficacy of sleep effects. Tryptophan metabolic disorders will cause diabetes and neurotic disorders, therefore in medicine it can be used in injections solutions of amino acids and amino acids compounds. In addition, some plants lack L-Tryptophan, so it is used as food and feed additive to improve the utilisation of plant proteins. It is the third-largest feed additive amino acid after methionine and lysine.

4. LIMITATION

Accounted for 1.6% of the total protein weight in food (FDA, 172.320,1994)

5. PACKING & SHELF LIFE

20 kg per bucket, 25 kg per bucket. Shelf life min. 2 years.

6. STORAGE

Dark, dry, cool place in hermetically closed bucket.

Any information in this publication is believed to be accurate and is given in good faith, but is for the customer to satisfy himself of the suitability for his own particular purpose. No representation, warranty or guarantee is made to its accuracy, reliability or completeness.

SAP INTERNATIONAL CORPORATION bvba Krekelenberg 69, B-2980 Zoersel, Belgium
Tel. +32-3-309.06.51 Fax. +32-3-309.19.31 Email : info@sico.be Website : www.sico.be

SICO FEEDS
EVERY TIME THE *right* SOLUTION