

**EAST CHEMSOURCES LIMITED**  
No.666 Haibin 12th Road, Huangdao, Qingdao, China

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**SPECIFICATION OF L-THREONINE**

**Commodity Name:** L-Threonine

**CAS No.:** 632-20-2

**H.S. Code:** 2922491090

**Synonyms:** D-Threonine; (2R,3S)-2-Amino-3-hydroxybutyric acid; D- $\alpha$ -Amino- $\beta$ -hydroxybutyric acid

**Molecular Formula:** C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>

**Molecular Weight:** 119.12

**Description:** L-threonine is a product of white crystals or crystalline powder. Good appearance, uniform particles, good liquidity, and no static, easy for adding and mixing. No smell, taste a bit sweet and will be melting at a temperature approx 253 ~ 256 °C. Basing on a high temperature, this product will be soon decomposition once encounter dilute alkali, slow decomposition once encounter acid. Soluble in water easily (9 g/100ml, 20 °C), do not dissolve in alcohol, ether and chloroform.

**Specification:** GB/T21979-2008

Item	Content
L-threonine (dried basis), %	≥98.5%
Specific rotation $[\alpha]_{20D}$	-26.00 ~ -29.00
pH (0.01g/mL)	5.0~6.5
Loss on drying%	≤1.00%
Residue on ignition, %	≤0.30%
Heavy metals (Pb), %	≤0.002%
Arsenic (As <sub>2</sub> O <sub>3</sub> ), %	≤0.0002%

**Packing:** 25kg/bags

**Usage:** Threonine as a feed additive, widely used to add piglet feed, boar feed, chicken feed, shrimp feed, prawn feed and eel feed, normally L-threonine with use of lysine together provided another powerful tool for feed producers to improve the feed quality further and keep feed cost lower.

It can be adjusted balance of amino acids in the diet, promoting growth and improving the meat, weight gain and increase lean meat percentage, lower rate of material and meat. Improve nutritional value in amino acid with low digestibility of the feed ingredients. Reducing protein content in feed, helping protein resources saves, reduce the cost of feed ingredie. Reducing the nitrogen content animal feces and urine, reducing speed of release ammonia concentration from hogpen.

It helps to strengthen animal disease resistance immunity.

**Storage:** Store in a cool, dry, ventilated environment.