



MASTERCHEM LIMITED

Sale E-Mail : Export@ChinaMasterChem.Com

L-ISOLEUCINE

● DESCRIPTION

L-ISOLEUCINE: AN INDISPENSABLE AMINO ACID FOR GROWTH PERFORMANCE.

L-Isoleucine is one of the essential amino acids for human and animals . It is branched chain amino acid as same as L-Leucine and L-Valine . They work together to recover muscles, help to enhance the muscle recovery after training. It can be used to make composite amino acid preparation.

The commercial availability of **L-Isoleucine** has allowed nutritionists to balance the amino acid content of swine and poultry feeds, meet the amino acid requirements of their high-yielding livestock without causing an imbalance in other amino acids, and significantly reduce the nitrogen excretion of their livestock through a reduction in dietary protein. Together, **L-Isoleucine** provides the feed industry with a tool that can meet a variety of economical, nutritional and environmental targets.

L-Isoleucine is an amino acid, one of three known as branched chain amino acids (BCAAs). The others are L-Leucine and L-Valine. **L-Isoleucine** is an isomer of Leucine. It is important in the regulation of blood sugar, and also helps increase energy level. L-Isoleucine can be obtained through the foods you eat or supplements. Some of these foods include meat, fish, eggs, beans, nuts and seeds.

What role does isoleucine play in the body?

- Isoleucine helps in the synthesis of biochemical compounds which lead to energy production. It enables recovery of the muscle after laborious physical activities. It increases endurance and stamina, even under adverse conditions of heat.
- It helps in healing of muscle tissues.
- It also acts as metabolic stress reliever by promoting protein anabolism and preventing protein catabolism and also acting as substrates for glycogenesis .
- Isoleucine helps maintain blood sugar level and energy level.
- It is necessary for hemoglobin formation.
- Isoleucine aids the process of thrombokinosis .

Benefits of L-Isoleucine

Some of the benefits of **L-Isoleucine** include the regulation of blood sugar levels in the body, and producing hemoglobin. This amino acid is responsible for muscle recovery after exercise, and is important in metabolism for producing energy.

L-Isoleucine is also beneficial for preventing muscles wasting in individuals with debilitations. It is also essential for the production and maintenance of body proteins, and is involved in blood clot formation.

L-Isoleucine is necessary for nitrogen balance in adults, and for the healthy, normal growth of infants.



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● SPECIFICATION

Physical Data

CAS NO. 73-32-5

Molecular Weight: 131.17

Quality Standard: USP24

Chemical formula: C₆H₁₃NO₂

ITEMS	SPECIFICATIONS	RESULTS
DESCRIPTION	WHITE CRYSTALS OR CRYSTALLINE POWDER	CONFIRMS
ASSAY	98.5%	98.9%
IDENTIFICATION (INFRARED ABSORPTION)	CORRESPONDING TO REFERENCE SPECTRUM	CONFIRMS
PH	5.5~7.0	6.2
SPECIFIC ROTATION	+38.9°-+41.8°	+40.5°
RESIDUE ON IGNITION	≤0.1%	0.06%
LOSS ON DRYING	≤0.3%	0.07%
CHLORIDE (CL)	≤500PPM	<500PPM
IRON (FE)	≤30PPM	<30PPM
SULFATE (SO ₄)	≤300PPM	<300PPM
HEAVY METALS	≤15PPM	<15PPM
LEAD (PB)	≤5.0PPM	<5.0PPM
ARSENIC (AS)	≤3.0PPM	<3.0PPM
CADMIUM (CD)	≤1.0PPM	<1.0PPM
MERCURY (HG)	≤1PPM	<1PPM
TOTAL PLATE COUNT	≤5000 CFU/G	<5000 CFU/G
YEAST AND MOLDS	≤100 CFU/G	<100 CFU/G
E.COLI	NEGATIVE IN 1G	CONFIRMS
STAPHYLOCOCCUS AUREUS	NEGATIVE IN 1G	CONFIRMS
SALMONELLA	NEGATIVE IN 10G	CONFIRMS
CONCLUSION: UP TO THE STANDARD		

Stability

Shelf life: 2 years (25kg fibre drum with 2 layers PE bags) when unopened

Packaging Specifications

Valine 25 kg fiber drums.

Loading : Max 10,000kgs per 20'FCL (no pallets)