L-Threonine

DESCRIPTION

L-Threonine

L-Threonine is an essential amino acid for animals. It can be used for the sedimentation of protein, participate in animal's supersession and maintaining activities to enhance the digestion and immune competence of the animal. It can also adjust the balance of the amino acids in feed, enhance the efficiency of feed utilization, and lower the cost of the feed when work with other amino acids.

CAS NO.: 72-19-5

Appearance: White to off-white powder

Molecular Weight: 119.12 **Molecular Formula:** C₄H₉NO₃

Structure of Threonine:

SPECIFICATION

ITEMS	SPECIFICATIONS	RESULTS
DESCRIPTION	YELLOWISH-WHITE, CRYSTAL	CONFORM
	POWDER	
RESIDUE ON IGNITION %	≤0.4	0.14
LOSS ON DRYING %	≤0.5	0.13
SPECIFIC ROTATION [α]D ^{20,c}	-26.7°29.0°	-27.94°
HEAVY METALS, (As Pb)	≤20PPM	CONFORM
ARSENIC (As), mg/kg	≤2PPM	CONFORM
ASSAY (DRIED BASIS) %	≥98.5	99.0

Stability

Shelf life: 3 years

Packaging Specifications

Threonine 25 kg bags:

20MT per 20'FCL

Threonine 800 kg big bag (BB):

16MT/20'FCL (two BB on each pallet)

MSDS

Description

Product Name: L-Threonine (Feed Grade)

Chemical Name: 2-Amino-3-Hydroxybutyric Acid

CAS Registry Number: 72-19-5

Synonyms: Threonine

Chemical Family: Amino acid

Composition: As L-Threonine, at least 98.5% pure

Formula: C₄H₉NO₃

Molecular Weight: 119.12

Physical Data

Appearance & Odor: White to off-powder or white granule

Solubility in Water 9.76 g/100 g water at 20°C

Percent Volatile: 0%

Evaporation Rate: None

Statement of Health Hazard

Hazard Description: Avoid contact with eyes: mild eye

irritant, otherwise non-hazardous.

Emergency Treatment

Eyes: Flush eyes with water for 15 minutes. Ensure thorough rinsing.

Spill or Leak Procedures

Flash Point: None

Auto-ignition Temperature: N/A

Flammable Limits in Air: Non Flammable

Extinguishing Media: Water



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Special Fire-Fighting Procedures: Should wear protective clothing and respiratory protection to protect from fumes. Unusual Fire & Explosion Hazards: Not a fire hazard

Chemical Reactivity

Stability: Stable if stored in dry conditions in sealed or

closed containers

Conditions to Avoid: None

Hazardous Decomposition Products: When heated to decomposition: Carbon monoxide, carbon dioxide, nitrogen oxides (NOx), hydrogen chloride gas fumes will be emitted.

Special Protection & Procedures

Respiratory Protection: Unnecessary

Ventilation: Ordinary

Protective Equipment: None needed

Handling & Storage

Handling: No particular protection required, although it is recommended to wear gloves and face mask if excessive handling is necessary.

Storage: Store in dry conditions in sealed or closed containers. After opening, the product should be used within a short period (hygroscopic product). Keep away from sources of ignition.

Labeling & Shipping

Proper Shipping Name: L-Threonine

Disposal Considerations

Disposal: Dispose of in accordance with all regulations.