



**AJINOMOTO®**

## AJINOMOTO HEARTLAND LLC

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# MATERIAL SAFETY DATA SHEET

## L-Threonine [Feed Grade, 98.5%]

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**MANUFACTURED AND DISTRIBUTED BY:** *Ajinomoto Heartland LLC*  
*1 Heartland Drive*  
*Eddyville, Iowa 52553*

**EMERGENCY PHONE:** *(641) 969-4551 – Eddyville, IA*  
*(773) 380-7000 – Chicago, IL*

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### 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:* C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>  
*Molecular Weight:* 119.12

### PHYSICAL DATA

*Bulk Density:* 0.6 to 0.7 grams/cm<sup>3</sup> (37 to 44 lbs/Ft<sup>3</sup>)  
*Appearance & Odor:* White to off-white granule  
*Solubility in Water:* 9.76 g/100 g water at 20°C  
*Percent Volatile:* 0%  
*Evaporation Rate:* None

***For animal feed only – not for human consumption***

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## L-TREONINE [Feed Grade, 98.5%]

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### 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

*Steps to be Taken:* Ordinary, same as food.

*Waste Disposal:* Dissolve or suspend in H<sub>2</sub>O

### FIRE & EXPLOSION HAZARD DATA

*Flash Point:* None

*Auto-ignition Temperature:* N/A

*Flammable Limits in Air:* Non Flammable

*Extinguishing Media:* Water

*Special Fire-Fighting Procedures:* Should wear protective clothing and respiratory protection to protect from fumes of NO<sub>x</sub>

*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 (NO<sub>x</sub>), hydrogen chloride gas fumes will be emitted.

### SPECIAL PROTECTION & PROCEDURES

*Respiratory Protection:* Unnecessary

*Ventilation:* Ordinary

*Protective Equipment:* None needed

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### 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

FDA<sub>CFR</sub>:

582.5881

AAFCO #:

6.5

### DISPOSAL CONSIDERATIONS

*Disposal:*

Dispose of in accordance with all regulations.

### OTHER REGULATORY REQUIREMENTS

None

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