

Product Information

ThreAMINO®

L-THREONINE, FEED GRADE 98.5 %

APPEARANCE

Granules: white to light brown  
 Bulk density: 730 kg/m<sup>3</sup> ± 10 %  
 Angle of repose: 35° ± 15 %  
 Powder: grey to beige  
 Bulk density: 650 kg/m<sup>3</sup> ± 15%  
 Angle of repose: 40° ± 15 %  
 Solubility: approx. 90 g/L water at 20 °C

SPECIFICATION VALUES

Assay (%) min.	98.5
Ash (%) max.	0.5
Loss on drying (%) max.	0.5

MOLECULAR DATA

Molecular formula: C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>  
 Molecular weight: 119.1 g/mol

PRODUCTION

ThreAMINO® is produced by a fermentation process.

USE

L-Threonine Feed Grade serves for the adequate supply of the essential amino acid threonine which cannot be synthesized by the animal and therefore needs to be ingested with the feed. It is specifically advantageous in low-protein diets for pigs, broilers and laying hens with high contents of grain, typically showing a considerable deficiency in threonine. This deficiency can perfectly be countered by supplementing crystalline L-Threonine Feed Grade. The benefits: improves feed intake and body weight gain, whilst reducing nitrogen excretion and feed costs.

NUTRITIONAL MATRIX

Nutrient	Matrix value	
	[MJ/kg]	[kcal/kg]
Threonine content	98.5 %	
Digestibility	100.0 %	
Crude protein (N x 6.25)	72.4 %	
Metabolizable energy	[MJ/kg]	[kcal/kg]
DE swine	16.9	4,030
ME swine	16.0	3,830
NE swine	12.4	2,960
ME poultry	14.6	3,490

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**PROCESSING**

ThreAMINO® can be processed into premixes, mineral feeds, and compound feeds, also in milk replacer, by any technical procedure. Its technical properties guarantee for homogeneous mixability and stability against demixing.

**STORAGE AND STABILITY**

ThreAMINO® should be kept cool and dry in unopened original packing. Storage conditions of 5–30 °C and 20–75 % rel. humidity are recommended. Under these conditions its active content is guaranteed for 3 years from the manufacturing date. The manufacturing date is part of the lot number on the package label.

**PACKAGING**

PP woven plastic bag with inner PE bag, 25 kg net.  
PP woven Bulk Bag; BB/FIBC, 800/900 kg net.

**REGULATORY AFFAIRS**

CAS-No.: 72-19-5  
Customs tariff number: 292250

L-Threonine is registered according to Commission Implementing Regulation EU 2016/1220 concerning the authorisation of L-Threonine as a feed additive for all animal species and thus listed in the Annex 1 of Register of feed additives of the European Union under point 3c410 and labeled accordingly.

ThreAMINO® is not subject to dangerous goods regulations.

**SAFETY AND ENVIRONMENT**

ThreAMINO® can be handled safely. According to EU chemicals legislation, it is non-toxic, and, if correctly handled, it does not irritate the skin and mucous membranes. Skin sensitization has never been reported, and is unlikely to occur. Accordingly, it is not classified as a hazardous chemical. Please follow instructions for personal protective equipment and other requirements in the Material Safety Data Sheet.

**For additional information, please contact us directly.**

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**Evonik Operations GmbH**  
Nutrition & Care  
Animal Nutrition Business Line  
  
animal-nutrition@evonik.com  
www.evonik.com/animal-nutrition