

Product Information

GuanAMINO® | Broiler

GUANIDINOACETIC ACID, FEED GRADE 96.0 %

DESCRIPTION

GuanAMINO® is a preparation of guanidinoacetic acid (GAA) 96 %, granulated with starch. GuanAMINO® is the innovative form of GAA, an amino acid derivative and precursor of creatine in the body. Creatine is a constituent of central importance in the energy metabolism particularly of muscle cells. Vertebrates can form creatine by de novo synthesis by methylation of GAA. In high yielding animals such as meat type broilers, the capacity of de novo synthesis of creatine might be a limiting factor and supplementation via feed can be beneficial. Such a deficiency can be compensated by using GuanAMINO®. Beside significant improvements in feed conversion ratio, higher body weight gain and breast meat yield were observed.

FEEDING INSTRUCTIONS

GuanAMINO® is added to the feed over the entire growth period at 600 to 1,200 g/ton of feed.

SPECIFICATION

Substance	Specification
Guanidinoacetic acid (GAA)	96.0 % (min.)
Loss on drying	1.0 % (max.)
Ash	0.5 % (max.)

APPEARANCE

White to slightly beige granulated powder  
 Bulk density: 550 kg/m<sup>3</sup> ± 10 %  
 Angle of repose: 28 ° ± 15 %  
 Particle size distribution:  
 100 % < 1,200 µm | D50 350 µm +/- 20 %  
 Solubility: max. 4.0 g/l water at 20 °C

MOLECULAR DATA

Molecular formula: C<sub>3</sub>H<sub>7</sub>N<sub>3</sub>O<sub>2</sub>  
 Molecular weight: 117.11 g/mol

PRODUCTION

GuanAMINO® is synthesized from chemical raw materials.

NUTRITIONAL MATRIX

Nutrient	Matrix value	
Guanidinoacetic acid (GAA)	96 %	
Digestibility	100 %	
Crude protein (N x 6.25)	221 %	
Arginine sparing*	≥ 77 %	
<b>Energy</b>	<b>[MJ/kg]</b>	<b>[kcal/kg]</b>
AME <sub>N</sub> content	10.6	2,540
AME <sub>N</sub> sparing	≥ 347	≥ 83,000

Trial data indicates that the energy sparing potential of GuanAMINO® can be at 100kcal / kg feed or even higher. This equates to ≥ 166,000 kcal / kg GuanAMINO®.

\* GuanAMINO® significantly improves weight gain and feed conversion in arginine-adequate, but particularly in arginine-deficient diets. Recent research has indicated that 1 kg of GuanAMINO® can spare at least 770 g dietary arginine.

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**PROCESSING**

GuanAMINO® can be processed into premixes, mineral, and compound feeds by any technical procedure. Its technical properties guarantee homogeneous mixability and stability against demixing.

**STORAGE AND STABILITY**

GuanAMINO® should be kept in unopened original packaging in a cool and dry place, with no direct exposure to the sun. Storage conditions of 5 - 30 °C and 40 - 75 % (41 - 86 °F) relative 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**

25 kg bag net weight / 1000 kg bulk bag net weight.

**REGULATORY AFFAIRS**

CAS-No.: 352-97-6

Customs tariff number: 292529

Guanidinoacetic acid is approved for use in chickens for fattening (broiler) according to European feed law and labeled accordingly. GAA belongs to the category 'nutritional additives' and the functional group 'amino acids, their salts and analogues' with the code 3c3.7.2.

GuanAMINO® is globally well accepted, however the individual registration status and covered species can be country specific. Please contact your Evonik expert regarding approval and availability in your country. GuanAMINO® is not subject to dangerous goods regulations.

**SAFETY AND ENVIRONMENT**

GuanAMINO® can be handled safely. According to EC chemicals legislation, it is non toxic, and, if correctly handled, it does not irritate the skin and mucous membranes. Accordingly, it is not classified as a hazardous chemical. The usual regulations of safety and hygiene for handling of chemicals should be followed.

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

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