

Unlock Lysine Power. Unleash Milk Yield.





AminoShure[™]-L

Precision Release Lysine

LYSINE THAT DELIVERS

Lysine is a tricky nutrient. It's essential for cow performance and the second limiting amino acid in the diet, but difficult to deliver in adequate amounts because it's destroyed by microbes in the rumen. Advanced microencapsulation is the key.

Balchem has spent decades perfecting the art and science of nutrient microencapsulation, leveraging an extensive range of lipid-based compounds to custom engineer coatings for each unique nutrient that survive the harsh environment in feeds and the even harsher conditions in the rumen, while still releasing the nutrient in the small intestine.

What is AminoShure-L?

AminoShure-L is a highly consistent and cost-effective source of metabolizable lysine, giving nutritionists greater flexibility to create diets that provide optimum levels of high-quality metabolizable protein (MP). The result: Improved performance and potentially lower ration costs. As protein utilization efficiency improves, due in part to amino acid balancing, nutritionists may be able to reduce the need to feed excess dietary MP and potentially reduce excess nitrogen excretion into the environment.

See the Value of AminoShure-L in Your Herd.

Contact your local Balchem represent more details. We'll show you how Amin

Unlock Your Cows' Genetic Potential.



Balchem Animal Nutrition & Health, the global leader in encapsulation technology, is dedicated to providing innovative products with superior performance. Using the latest manufacturing innovations, AminoShureTM-L Precision Release Lysine delivers a consistent, reliable and cost-effective level of bioavailable lysine to the cow, allowing her to reach her genetic potential for milk production.



Consistent:

Reliable:



Cost-Effective:

AminoShure-L provides the consistency you can count on when balancing for precise levels of amino acids to meet the exact nutritional needs of the animal.

AminoShure-L has been subjected to the same rigorous testing and development protocols as the other encapsulates in the Balchem lineup and offers the same precision nutrient delivery that you've come to expect from Balchem products.

By leveraging Balchem's innovative encapsulation technologies and manufacturing efficiencies, we can provide an effective replacement for traditional lysine sources.

A recent meta-analysis¹ showed that feeding rumen-protected lysine can deliver up to:

- +1.8 kg/cow/day more milk
- +2.5 kg/cow/day more Fat-Corrected milk
- +2.4 kg/cow/day more Energy-Corrected milk
- + 100 g/cow/day more milk fat yield
- Improved feed efficiency and reduced nitrogen excretion

¹Arshad et al., 2024

AMINOSHURE-L PERFORMANCE RESULTS

| AminoShure-L | 0 g/day | 30 g/day |
|---------------------------|---------|--------------------|
| DMI, kg/day | 23.7° | 24.6 ^b |
| Milk Yield, kg/day | 38.6° | 41.2 ^b |
| Milk Fat, % | 2.91⁰ | 3.10 ^b |
| Milk Fat Yield, g/day | 1112ª | 1276⁵ |
| Milk Protein, % | 3.10 | 3.01 |
| Milk Protein Yield, g/day | 1194° | 1239 ^{ab} |
| Milk Nitrogen Efficiency | 29.9% | 30.5% |

J. Dairy Sci. 92 (Suppl. 1): T294. (Abstr.)

cative at ANH.Marketing@Balchem.com or visit Balchem.com/AminoShure-L for oShure-L will fit your amino acid balancing program and deliver more to your bottom line.

Why Balance for Amino Acids?

Dairy cows do not have a protein requirement, but rather an amino acid requirement from which proteins are synthesized.

Lysine and methionine are essential amino acids for mammals and a building block used to synthesize proteins required to build and maintain virtually every tissue in the body. If an animal is unable to consume enough, protein synthesis will not proceed, compromising the health, productivity and life of the animal.

In dairy cattle, lysine and methionine are not only essential; but are considered the first two limiting amino acids. This means they are the first amino acids in short supply when a dairy cow synthesizes protein. Without sufficient lysine and methionine, a cow is unable to build the proteins that are required for tissue and organ maintenance, growth, reproduction, fetal growth, and perhaps most importantly, milk protein production.

A cow receives metabolizable amino acids from two primary sources; the feed she consumes and from microbial protein generated in the rumen. Traditional feed sources of lysine and methionine are highly degraded by rumen microbes, making them less available for absorption. Supplying them in a rumen-protected form is essential to ensure adequate amounts reach the small intestine for absorption.

By optimizing your ration with rumen-protected amino acids, you can:



Increase milk and component yield and %



Improve cow health and fertility



Reduce feed costs by lowering crude protein



Reduce nitrogen waste

