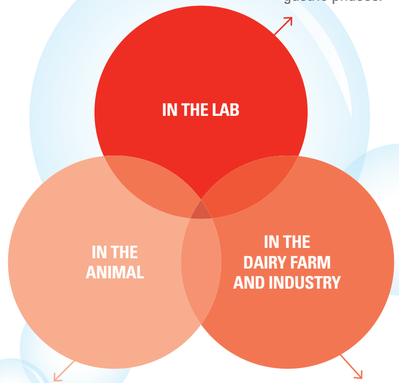
WHY KESSENT?

KEMIN'S **THREE-STEP** EVALUATION **PROCESS** VALIDATES THE EFFECTIVENESS AND THE SUPERIORITY OF KESSENT. WE OFFER THE BEST RUMEN PROTECTED METHIONINE, SUPPORTED BY THE BEST **TECHNICAL SERVICE.**

KESSENT's superiority and higher **stability** has been proven in our Ruminant *In Vitro* Release Model. This model studies the behavior of different rumen protected Methionine supplements, simulating all gastric phases.



KESSENT combines a high Methionine availability with a high **stability** under field conditions, resulting in the highest metabolizable Methionine content for ruminant formulation, measured under *In Vivo* conditions.

KESSENT produces the best productive performance results and profitability, enhances cheese efficiency, milk yield and allows more accurate ruminant diet formulations. This has been shown consistently throughout countless field, academic and industry trials.

KEMIN | KESSENT™ INSPIRING SUSTAINABLE FARMING

ARE YOU READY FOR THE NEXT LEVEL IN RUMINANT NUTRITION?

RUMINANT ESSENTIALITIES
by KEMIN

A complete ruminant portfolio scientifically proven, consistently tested under field conditions and supported through our lifelong learning program.

INSPIRING AMINO ACID NUTRITION

KESSENT™
LysiGEM™
LysiPEARL™
MetiPEARL™

LEADING HEALTHY NUTRITION

CholiGEM™
CholiPEARL™
NutriCAB™
KemTRACE™
TOXFIN®

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www.kemin.com/kessent

METHIONINE NUTRITION

KEMIN®

WHY ARE RUMEN PROTECTED AMINO ACIDS REQUIRED?

- ✓ Methionine and Lysine work in concert; both amino acids are necessary in diets for the most flexible and precise formulation. It results in maximum production performance without overfeeding
- ✓ In mid-range crude protein diets, it is not possible to meet Methionine needs with the use of dietary feed ingredients. Therefore the use of rumen protected Methionine is required
- ✓ Methionine is the first limiting amino acid for lactating dairy cows, as feed proteins have lower concentrations of Methionine and Lysine when compared to their concentrations in milk and microbial protein
- ✓ Balancing diets for Methionine and Lysine improve ruminant sustainability both environmentally and economically. These two essential amino acids enhance animal health and farm profitability with a positive environmental impact.

WHAT ARE METHIONINE'S SPECIFIC ROLES IN RUMINANT NUTRITION?

- ✓ Improves R.O.I and net income in field conditions. The positive effect is even stronger if you start feeding Methionine during close-up period
- ✓ Improves the efficiency of metabolizable protein. Diets with lower crude protein content can be formulated without compromising the yield of milk and milk components
- ✓ Enhances productivity performance, milk production and milk protein synthesis
- ✓ Decreases the incidence of metabolic disorders
- ✓ Increases casein content, resulting in dairy production profitability
- ✓ Improves the anti-oxidant animal capacity, health status and immunometabolism
- ✓ Improves dairy herd fertility
- ✓ Is a precursor of carnitine, the transport vehicle to carry long chain fatty acids into the mitochondria for ß-Oxidation
- ✓ Facilitates the synthesis of apoprotein B which is responsible for exporting triglycerides from the liver to peripheral tissues

KEMIN | KESSENT™ INSPIRING SUSTAINABLE FARMING

INSPIRING SUSTAINABLE FARMING!

KESSENT is designed for a new way of farming, based on fully tested and sustainable solutions: sustainable business, environment and health.

An experienced team and technical services form the bridge between scientific knowledge and implementation in the field.

The special technical protection, ideal particle size and specific gravity of KESSENT results in an elevated level of rumen escape, providing a high intestinal Methionine content absorbed and available by the animal.

Kemin is the only provider of both rumen protected amino acids Methionine and Lysine, in a reliable way.

KESSENT
INSPIRING SUSTAINABLE FARMING

KESSENT™ M

Best source of metabolizable Methionine due to our unique encapsulation and core technology

75% DL-Methionine/90% Rumen Escape/90% Intestinal Availability/608 g of MP Methionine/kg of product

- DAIRY COW: 12-16 g per head per day*
- BEEF CATTLE: 12-16 g per head per day*
- SMALL RUMINANTS: 5-9 g per head per day*

KESSENT™ MF Liquid

Pellet stable rumen protected Methionine

950 g HMBi/kg of product/740 g Methionine/kg of product/50% final bioavailability/370 g MP Methionine/kg of product

- DAIRY COW: 20-30 g per head per day*
- BEEF CATTLE: 20-30 g per head per day*
- SMALL RUMINANTS: 8-20 g per head per day*

KESSENT™ MF Dry
KESSENT™ MF Dry Aroma

Pellet stable rumen protected Methionine

570 g HMBi/kg of product/444 g Methionine/kg of product/50% final bioavailability/222 g MP Methionine/kg of product

- DAIRY COW: 25-49 g per head per day*
- BEEF CATTLE: 12-22 g per head per day*
- SMALL RUMINANTS: 5-10 g per head per day*

Dry Aroma is a dry version with improved palatibility and feed smell which allows a better handling in the factory and better feed intake.

It's important to cover Methionine requirements in different stages and depending on different dietary feed ingredients. Kemin will provide you tailored support.

* Usual inclusion rate in EMENA conditions.

KEMIN | KESSENT™ INSPIRING SUSTAINABLE FARMING