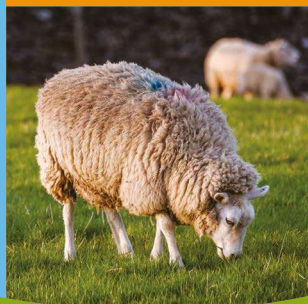




Knowledge grows

RUMISAN®



RUMISAN®

Proven Excellence in Ruminant Nutrition



RUMISAN®: High-Efficiency protein source for optimal ruminant nutrition

RUMISAN is an efficient source of non-protein nitrogen. It contains 46% nitrogen which is equivalent to 288% crude protein.

Unlock peak ruminant performance with RUMISAN

Proteins are essential for animal growth, milk production, and reproduction. In ruminants like cattle and sheep, rumen microbes convert feed protein into ammonia, then use this nitrogen to produce microbial protein – the animal's primary protein source (up to 80% of the protein is coming from microbial sources!). RUMISAN, our premium feed-grade urea, provides a concentrated, readily available form of nitrogen. This allows rumen microbes to efficiently produce high-quality protein, supporting optimal ruminant nutrition and productivity.

By choosing RUMISAN, you're not just feeding your animals – you're fuelling the microscopic powerhouses that drive their performance.

Sustainable and efficient growth and milk production

Globally, more than half of the vegetable protein produced is used for animal feed. Ruminants have the unique ability to convert non-protein nitrogen into valuable microbial protein. By incorporating RUMISAN into ruminant diets, we can significantly reduce the dependence on vegetable proteins. This not only optimizes costs and reduces the need for storage space, but also minimizes the competition for these proteins between humans and animals.

Trust in every prill: total traceability

FAMI^QS

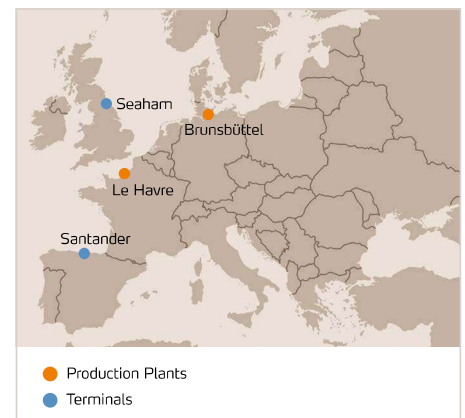
At Yara, your peace of mind is our priority. RUMISAN is produced in FAMI-QS certified factories in Le Havre (France) and Brunsbüttel (Germany), ensuring that every batch meets the highest standards of safety, quality, and regulatory compliance. These facilities are also certified under OHSAS 18001:2007, ISO 14001:2004, and ISO 9001:2000, so you can trust that RUMISAN adheres to strict hygiene and safety requirements as outlined by the EU Feed Hygiene Regulation EC 1831/2003.

Our Feed Safety Management System, including Good Manufacturing Practices, ensures full traceability from production to packaging.

With RUMISAN, you always know what you're getting—and where it's coming from.

As the world leader in nitrogen chemistry, Yara guarantees reliable supply with a secure backup system between our two production plants. This means that RUMISAN is always available when you need it, offering unmatched consistency and high quality for your ruminant feed program.

Production Plants Europe



Our origins in France and Germany provide a solid foundation and guarantee for Le Havre and Brunsbüttel production, reflecting our commitment to quality and reliability. As a key European producer, we proudly carry the Origine France Garantie certification for our Le Havre site, further emphasizing our dedication to European standards of excellence.





By incorporating our terminals in Seaham and Santander, we ensure comprehensive coverage across most of Europe. As the main European producer, we not only stand out in the market but also boast a broad and influential presence across the continent. This extensive reach allows us to effectively meet the diverse needs of our customers, reinforcing our position as a leader in the industry.

Choosing RUMISAN means:

- **Sustainable Feed Production:** Reduce competition between feed and food resources.
- **Efficient and Cost-Effective Growth:** Maximize your herd's performance with concentrated nitrogen that supports healthy growth, milk production, and fertility.
- **Significant Feed Cost Savings:** Lower your feed costs by replacing expensive vegetable protein sources like soybean meal with RUMISAN.
- **Reduced Commodity Price Volatility:** Minimize the impact of fluctuating commodity prices.
- **Storage and Inventory Savings:** Save on storage space and reduce inventory costs.
- **Guaranteed Quality & Full Traceability:** Every batch of RUMISAN is produced in certified factories with complete transparency and traceability.

- **Reliable Supply:** Backed by Yara's global expertise, ensuring a consistent, high-quality product every time.
- **Ease of Use:** Easily integrate RUMISAN into your existing feeding programs with versatile applications in concentrates, premixes, blocks, and roughages.

Versatile applications of RUMISAN

RUMISAN is a flexible solution that can be integrated into various feeding systems to optimize performance:

- **Feed concentrates:** Incorporate up to 3% RUMISAN for balanced nutrition.
- **Protein concentrates:** Formulate with 2-3% RUMISAN to boost protein content.
- **Premixes:** Combine minerals, salt, and up to 3% RUMISAN for an effective feed additive.
- **Semi-liquid feeds:** Add up to 10% RUMISAN alongside minerals, molasses, and corn meal.
- **Liquid protein supplements:** Typically contain 10% RUMISAN, molasses, added vitamins, and trace minerals.
- **Mineral blocks:** Integrate 15-20% RUMISAN into mineral and salt blocks for fortified nutrition.
- **Roughages:** Use a 5% RUMISAN solution (15L per 100kg of forage) with a 48-hour plastic cover for optimal results.

- **Green roughages:** Mix 800g of RUMISAN per 100kg of green materials like sugarcane.
- **Farm-level use:** Farmers can easily mix RUMISAN directly with roughages for effective supplementation.

Important Feeding Guidelines:

- Urea supplementation should not exceed 1% of the total dry matter in the feed, which equals approximately 0.3 grams per kilogram of body weight per day.
- To safely utilize urea, it is essential that animals have a well-adapted ruminal microbiota and are fed diets rich in easily digestible carbohydrates.
- We recommend consulting a nutritionist to determine the appropriate dosage tailored to your livestock's specific needs

