

# **Knowledge grows**

# Rumisan® Feed Grade Urea

# Sales Specification

## **Product Properties**

	Limiting Values	Typical
Urea	min. 97 weight %	98,5 weight %
Total nitrogen	min. 46 weight %	46,3 weight %
Biuret	Max. 1 weight %	
Undesirable substances	Conform to EU regulation	

## Physical Properties

Bulk density (loose)	745 g/l
Average size	1,7 mm +/-0,2
Sieve analysis 1,0 - 2,5 mm	95 weight %
< 0,2 mm	0,2 weight %
pH (10% solution)	8 to 10
Water insoluble	< 15 ppm
Ashes	< 20 ppm

The information above is intended to serve as guidelines and does not constitute a guarantee. We reserve the right to make changes.

#### Identification

Chemical formula: CH4N2O

CAS No.: 57-13-6 EINECS No.: 200-315-5

REACH Registration number: 01-2119463277-33

Feed additive identification number: 3d1

Category of nutritional additives. Functional group: Urea and its derivatives according to commission implementing regulation on additives for use in animal nutrition.

#### Description

Urea is a inorganic compound found in nature. Thanks to its technology Yara produce technically pure feed grade urea from the synthesis of natural gas and nitrogen found in the air. Rumisan feed grade urea is a solid white prill with an even round shape.

NPN compounds can be used to supplement the diets of ruminants across a range of feed strategies.

#### **Nutritive Value**

Protein is a major limiting nutrient for current animal production. Feed grade urea is a non-protein nitrogen (NPN) source for ruminants. Microbes in the rumen metabolize NPN compounds to produce ammonia and use this ammonia for microbial protein synthesis, that will be available for absorption through the gastrointestinal tract.

One kilogram of Rumisan feed grade urea has a value of 2,88 kg crude protein for ruminants.





#### Feed Safety and Quality Management

Yara Le Havre and Yara Brunsbüttel have implemented and maintain a Feed Safety Management System including Good Manufacturing Practice (GMP) in compliance with the FAMI-QS Code of Practice for Feed Additives operators for the marketing, production, warehousing, and packaging of Feed Additives. feed.urea@yara.com www.yara.com

#### Directions For Use \*

Urea shall only be fed to animals with a functional rumen. Feeding urea to the maximum level dose should be done gradually. The maximum content of urea should be only fed as part of diets rich in easily digestible carbohydrates and low in soluble nitrogen. A maximum 30 % of total nitrogen in the daily ration should come from urea-N. Rumisan is a technically pure non protein nitrogen feed nutritional additive for ruminants with a functional rumen, the maximum content of Rumisan in complete feed with a moisture content of 12 % is 8,800 mg/kg. \* according to EU regulation No 839/2012.

# Handling and Storage

Solid urea is hygroscopic. To minimize the formation of lumps and cakes of urea, it is recommended to:

- store urea in the range 10 30°C, with relative humidity below and close to 70%.
- storage temperature must be as stable as possible.
- minimize storage height.
- avoid loading product during rain.
- reduce fall height when handling product in bulk to minimize dust formation.
- when stored in silo: silo should be easy to enter if necessary to remove lumps/cakes, silos stored outside should be insulated and kept at sufficiently high temperature.

When handled and stored according to instructions shelf life is one year.



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