

# UREA FEED GRADE

Technical  
Information



## Cattle Feed Supplement

### Product Description

UREA FEED PRILL is a small diameter, spherical white solid. It is an organic molecule (amide) containing 46% nitrogen in the form of amine groups. UREA is easily decomposed to ammonia and carbon dioxide by heating which has made it a popular substitute for anhydrous ammonia as a catalytic fuel source. UREA is infinitely soluble in water and is a benign and safe chemical to handle.

### Application Recommendations

- The UREA is added to cattle feed to boost the protein content. UREA is only a nutrient to animals with rumens that possess the urease enzyme which allows the metabolism of the chemical.
- UREA prill may also be used as a slow release fertilizer. It must be decomposed by microorganisms before it can be assimilated by plants.
- Consult your local fertilizer dealer for fertilizer applications of this product.

### Transportation, Storage and Handling

- UREA will decompose into ammonia and carbon dioxide at 275°F.
- **ALWAYS** wash vessels containing UREA thoroughly before attempting repairs requiring welding.
- Should a large spill of UREA solution occur, **ALWAYS** restrict it from the drainage. The high nitrogen content (46%) may kill foliage if not diluted.
- UREA can be handled by the municipal water treatment facility if spilled in a municipality.
- **NEVER** allow UREA to come in contact with nitric acid. The resulting chemical is unstable and dangerous.

## Properties

MSDS  
#1132

Total Nitrogen by weight minimum	46.0%
Crude Protein by weight minimum	287 units
Urea by weight typical	97.8%
% Nitrogen from urea by weight	45.6%
Biuret by weight typical	0.4%
% Nitrogen from biuret by weight	0.2%
Methanol Urea (MU) by weight	1.3% to 1.6%
% Nitrogen from MU by weight	0.5%
Ammonia by weight maximum	150 ppm
Water by weight maximum	0.30%
Bulk Density lbs / ft <sup>3</sup>	46
pH one molar solution	7.0 to 9.5

### Typical Size Distribution

U.S. Standard Mesh	+8	+12	+14	+16	finer
Average % retained	6	55	37	1	1

In terms of fertilizer, the Size Guide Index (SGI) is 170.

### Hazardous Shipping Description

- There are no DOT restrictions (other than weight) to transport UREA.
- Consult MSDS #1132 for more specific and comprehensive information about chemical hazards.

**Product Disclaimer** Dyno Nobel Inc. and its subsidiaries disclaim any warranties with respect to this product, the safety or suitability thereof, or the results to be obtained, whether express or implied, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND/OR OTHER WARRANTY. Buyers and users assume all risk, responsibility and liability whatsoever from any and all injuries (including death), losses, or damages to persons or property arising from the use of this product. Under no circumstances shall Dyno Nobel Inc. or any of its subsidiaries be liable for special, consequential or incidental damages or for anticipated loss of profits.

NSH-20-05-05-11

### Dyno Nobel Inc.

2795 East Cottonwood Parkway, Suite 500, Salt Lake City, Utah 84121 USA  
Phone 800-732-7534 Fax 801-328-6452 Web www.dynonobel.com

**DYNO**  
Dyno Nobel

Groundbreaking Performance™