

## UREA

### Automotive Grade Urea (AGU)

#### Properties

SDS  
#1137

<b>Total Nitrogen Analysis</b> (guaranteed)	46.0 minimum by weight
<b>Water</b>	0.2% by weight
<b>Biuret</b> (guaranteed)	0.1% by weight maximum
<b>Formaldehyde</b>	0.0%
<b>pH</b>	8.5 – 9.5 by weight
<b>Bulk Density</b>	46.5 pounds/cubic foot
<b>Physical form</b>	1/8 – 1/4" diameter cylindrical pellets
<b>Color</b>	White

#### Typical Size Distribution

Tyler Mesh Analysis	-2+4	-4+6	-6+8	-8
Average % retained	91%	7.5%	1%	0.5%
Cumulative %	91%	98.5%	99.5%	100%

#### PRODUCT DESCRIPTION

Automotive Grade Urea (AGU) is a white, solid, cylindrical pellet. It is manufactured by compressing pure urea crystals in a pelletizing process which avoids the melting and heating of the urea where the majority of biuret is formed. It is an organic amide molecule containing 46% nitrogen in the form of amine groups. Urea is infinitely soluble in water and is a benign and safe chemical to handle. This product contains NO formaldehyde.

#### APPLICATION RECOMMENDATIONS

- Production of Diesel Exhaust Fluid

#### 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.
- **NEVER** allow Urea to come into contact with nitric acid. The resulting chemical is unstable and dangerous.

#### HAZARDOUS SHIPPING DESCRIPTION

- There are no DOT restrictions, other than weight, to transport Urea prill.
- A large spill of Urea should be recovered dry. All attempts should be made to keep it from dissolving into a vegetated drainage. The high nitrogen content (46%) may kill foliage if not diluted. Dissolved Urea can be handled, if necessary, by a municipal water treatment facility.
- Consult SDS #1137 for more specific and comprehensive information about chemical hazards.

**ADDITIONAL INFORMATION** – Visit [dynonobel.com](http://dynonobel.com) for Brochures and Case Studies related to this product.

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