TECHNICAL DATA SHEET

UREA LIQUOR

70% Aqueous Cattle Feed Supplement

Properties	SDS #1020
UREA % by weight	70.0 - 70.5
Water % by weight maximum	29.5 - 30.0
Biuret % by weight maximum	.5
Free Ammonia % by weight	.5
pH	6.5 - 7.5
Salt-out Temperature (open vessel)	135°F – 137°F
Storage Temperature	40 to 80°F
Weight @ 68°F	9.1 lbs/gallon

Hazardous Shipping Description

- The transport of UREA LIQUOR solution is shipped hot in transports that do not have hazard warning placards.
- There are no DOT restrictions, other than weight, to transport UREA solutions. It may have a "HOT" label on the trailer to advise of the elevated temperature of the liquor.
- Consult MSDS #1020 for more specific and comprehensive information about chemical hazards.

PRODUCT DESCRIPTION

UREA LIQUOR solution is created by dissolution of the pure amide directly into clean condensate so there are no ions of any metals present. It is a clear, colorless solution with a slight ammonia odor.

APPLICATION RECOMMENDATIONS

- UREA LIQUOR is added to cattle feed to boost the protein content. UREA LIQUOR is a nutrient only to animals with rumens that possess the urease enzyme which allows the metabolism of the chemical.
- Consult your Dyno Nobel representative for additional information.

TRANSPORTATION, STORAGE AND HANDLING

- Hot concentrated UREA LIQUOR solution poses a moderate health hazard to the handler. If tissue is contacted with this hot solution it can cause second degree burns.
- ALWAYS wear liquid impervious clothing, gloves and boots. ALWAYS protect eyes and face with shield when loading.
- UREA will decompose into ammonia, carbon dioxide and nitric acid at 275°F.
- ALWAYS wash vessels containing UREA thoroughly before attempting repairs requiring welding.
- Should a large spill of UREA LIQUIOR solution occur, it should be recovered dry.
- 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 dried UREA solution to come into contact with nitric acid. The resulting chemical is unstable and dangerous.

ADDITIONAL INFORMATION – Visit **dynonobel.com** for Brochures and Case Studies related to this product.

DYNO® Dyno Nobel