# TECHNICAL DATA SHEET

## **UREA AMMONIUM NITRATE**

**UAN Fertilizer Solution 32%** 

Properties	SDS #1138
Total Nitrogen % by weight minimum	32
Urea % by weight typical	40.9 to 31.2
Amine Nitrogen from Urea % by weight	19.1 to 14.5
Ammonium Nitrate % by weight typical	36.9 to 49.9
Nitrate Nitrogen from Ammonium Nitrate % by weight	10.0 to 13.5
% Ammoniacal Nitrogen from Ammonium Nitrate % by weight	2.9 to 3.9
Ammonia % by weight typical	< 0.15 maximum (unbound)
Water % by weight typical	22.1 to 18.8
Ammonium Nitrate to Urea Ratio	0.9 to 1.6
Corrosion Inhibitor % by weight typical	0.03 to 0.05
Solution Weight at 60°F (lbs/gal)	~11
Salt-out temperature °F	40° to 32°
Fertilizer Nutrition Designation	32-0-0

**Hazardous Shipping Description** 

- There are no DOT restrictions, other than weight, to transport UAN 32
- Consult MSDS #1138 for more specific and comprehensive information about chemical hazards

#### PRODUCT DESCRIPTION

The UREA/AMMONIUM NITRATE (UAN) solution is created

by dissolution of the amide and nitrate salt in water. It may have a slight ammonia odor. Approximately 35% UREA blended with 45% AMMONIUM NITRATE makes a fertilizer solution that is 32% nitrogen by weight.

#### **APPLICATION RECOMMENDATIONS**

- The lowest salt-out temperature possible for UAN 32 is 32°F at a ratio of 1.30 AMMONIUM NITRATE to UREA.
- UREA is used as a slow release fertilizer. It must be decomposed by microorganisms before it can be assimilated by plants. The AMMONIUM NITRATE is the fast release part of the fertilizer. The plants quickly absorb the nitrate ion and ammonium ion for immediate metabolism.
- Consult your local fertilizer dealer for application recommendations

#### TRANSPORTATION, STORAGE AND HANDLING

- The transport of UAN does not require a DOT placard
- UREA/AMMONIUM NITRATE solution will decompose into ammonia, carbon dioxide and nitric acid at 237°F
- ALWAYS wash vessels containing UAN thoroughly before attempting repairs requiring welding
- ALWAYS restrict it from the drainage Should a large spill of UAN solution occur.
- The high nitrogen content (32%) will kill foliage if not diluted
- UAN can be handled by the municipal water treatment facility if spilled in a municipality

### **ADDITIONAL INFORMATION –** Visit <u>dynonobel.com</u> for Brochures and Case Studies related to this product.

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