

PRODUCT SPECIFICATION SHEET

Urea Ammonium Nitrate Solution (UAN) UAN 28%, 30% and 32% Total Nitrogen

Typical Chemical Analysis			
Parameter	UAN – 28	UAN – 30	UAN – 32
Total Nitrogen wt. %	28.0	30.0	32.0
Free Ammonia, ppm	500 max	500 max	500 max
Ammonium Nitrate, wt. %	36 – 42	38 – 45	41 – 48
Urea, wt. %	29 – 33	30.5 – 35.6	32.6 – 38
Corrosion Inhibitor, ppm	150 – 250	150 – 250	150 – 250
Typical Physical Properties			
Physical Form	Liquid	Liquid	Liquid
Color	Colorless	Colorless	Colorless
Odor	Slight Ammonia odor (Pungent)	Slight Ammonia odor (Pungent)	Slight Ammonia odor (Pungent)
Boiling Point	Approximately (225 °F – 107 °C)	Approximately (225 °F – 107 °C)	Approximately (225 °F – 107 °C)
Melting/Freezing Point	28% UAN Salts Out @ 0 °F (–18 °C)	30% UAN Salts Out @ 16°F (–9 °C)	32% UAN Salts Out @ 32°F (0 °C)
PH	6.8 – 7.5	6.8 – 7.5	6.8 – 7.5
Solubility	100%	100%	100%
Specific Gravity	1.281	1.304	1.330
Density @ 60 °F (lbs/Gallon)	10.67	10.86	11.08
Density @ 16 °C (Kg/Liter)	1.28	1.30	1.33
Salt Out Temperature, °F	0(–18 °C)	16 (–9 °C)	32 (0 °C)
% Volatile By Volume	No Test Results	No Test Results	No Test Results
Molecular Weight	Not Applicable	Not Applicable	Not Applicable
Critical Temperature	No Test Results	No Test Results	No Test Results
Critical Pressure	No Test Results	No Test Results	No Test Results

Comments:

UAN contains a corrosion inhibitor which reduces the corrosion rate of carbon steel under ambient conditions. UAN solution is corrosive and precautions should be taken to prevent corrosion damage and/or loss of product.

STANDARD SPECIFICATION OF GRANULAR & PRILLED UREA

Physical Specification

- Non-clotted 100% free from harmful substances.
- Internationally accepted standard for urea N46%.
- Free floating, treated with anti-caking treatment.
- Free from Impurities, Sand, Dust and Certified Non Radioactive.
- Physical state solid >20 and 101KPS, white granules.
- Vapor density not applicable.
- Floatability / Water sinks and mixes.
- Molecular weight 60.065.
- PH Value 8.0 – 8.5.

USAGE

More than 90% of world industrial production of Urea is destined for use as nitrogen-release fertilizer. Urea has the highest nitrogen content of all solid nitrogen content of all solid nitrogenous fertilizers in common use. Therefore, it has the lowest transportation costs per units of nitrogen nutrient. The standard crop-nutrient rating of urea is 46-0-0. The most common impurity of synthetic urea is Biuret, which impairs plant growth.

Urea is usually spread at rates of between 40 and 300 Kg./HA but rates vary. Smaller applications incur lower losses due to leaching. During summer season, Urea is often spread just before or during rain to minimize losses from volatilization (A process wherein nitrogen is lost to the atmosphere as Ammonia Gas).

Because of the high Nitrogen concentration in Urea, it is very important to achieve an even spread. The application equipment must be correctly calibrated and properly used.