

PRODUCT: GRANULAR UREA (For Sales in Nigeria)

Sr. No.	Parameters	Method No.	Unit	Specification limits
1	Appearance	Visual	-	Granular Solid, free from foreign particles
2	Total Nitrogen	Calculation	Wt. %	46.0 min
3	Biuret	AOAC 960.04	Wt. %	1.5 max
4	Moisture	Karl-Fischer	Wt. %	0.5 max
5	Size Distribution	Sieve		
5.1	Between 2 and 4.5 mm	Analysis – (ASTM mesh)	Wt. %	90 min
5.2	Under 2 mm		Wt. %	5 max
5.3	Over 4.5 mm		Wt. %	7 max
6	Free Ammonia	Formol Method	Wt. ppm	50 max
7	Iron as Fe	Colorimetric	Wt. ppm	1 max

Remark:

Urea product shall have anticaking agent in the range of 0.45-0.55%.

Physical properties:

Chemical Name : Carbamide
Formula : $\text{CH}_4\text{N}_2\text{O}$
Molecular weight : 60.06
Melting range : 133 °C
Specific gravity (20°C) : 0.74 gm/cc (Water = 1)