Fertilizers

Prilled urea 46%

Concentrated nitrogen fertilizer

46%



Material illustration

Technical characteristics

Prilled urea forms as droplets of molten urea solidify in a prilling tower. It consists of rounded particles, generally smaller than granular urea.

Property	Reference value	Method or source
Nominal total nitrogen	**46 %**	FAOSTAT
Chemical formula	**$CO(NH_2)_2$**	PubChem · Urea
CAS number	**57-13-6**	PubChem · Urea
Molar mass	**60.06 g/mol**	PubChem · Urea
Biuret	**≤ 1.5 %**	FAO
H_2O	**≤ 1 %**	FAO
Particle size	**≥ 90 % / 1–2.8 mm**	FAO

FAO limits are a published procurement example. Particle size is assessed by sieving, and moisture is expressed as a mass fraction.



Applications

For nitrogen fertilizer supply and handling systems designed for smaller particles. Fines formation and caking matter during repeated transfer and prolonged storage.



Packaging and receipt

Options include palletised bags, bulk bags and loose bulk. Pack size depends on throughput and unloading equipment. Covered dry storage and moisture protection help preserve flow.

For acceptance, check the agreed specification and the certificate of analysis (COA) for the delivered lot.