

UREA, FEED GRADE

Identification

Chemical Substances

CO(NH₂)₂

Synonyms: NPN Protein, Urea prills

CAS No. 000057-13-6

Description

FEED GRADE UREA is pure urea (> 98 % CO(NH₂)₂ equivalent), used as a protein substitute in animal feeds (non-protein nitrogen, NPN), containing a small proportion of biuret (polymerised urea), which in itself may also be used in animal feeds.

UREA is in the form of free-flowing granules or prills, about 1,5-mm diameter, free from extraneous matter.

UREA may have a light green colour, when artificially coloured to distinguish it from other grades.

Composition, Typical values

Free moisture	< or = 0.5 %
Arsenic Lead	1 mg/kg
Lead	1 mg/kg
Iron	1 mg/kg
Total nitrogen as N	46.0 %
As protein equivalent	287 %
Biuret	< or = 1.0 %

Physical Properties

Appearance	Light green, free flowing granules
Particle sizes	90 % < 2.8 mm
Bulk Density (untamped)	0.73-0.75
(Tamped)	
Molecular mass	60
Boiling point	Decomposes
Melting point °C	132.6

Recommended Use / Application

This product is recommended for use as a protein source in concentrates, compound feeds, mineral feeds and free choice supplements for ruminants. UREA has no feeding value for monogastric animals.

Special Advantages

- FEED GRADE UREA is a highly concentrated nitrogen source.
- The small particle size assures accurate mixing.
- The green colour eliminates the confusion with other urea types.
- FEED GRADE UREA dissolves quickly in water.
- FEED GRADE UREA is free flowing.
- The high solubility makes it suitable for use in liquid and suspension feeds.
- UREA can be used to treat silage and low quality roughages to improve the feeding value.

Caution

FEED GRADE UREA could be poisonous if used indiscriminately. Read instructions on bag carefully.

P R O D U C T I N F O R M A T I O N

Undesirable Elements¹⁾

Arsenic (As)
Lead (Pb)
Buret
Free ammonia

Act 36/1947

Max 2 mg/kg
Max 10 mg/kg
Max 15 g/kg
Max 0.3 g/kg

Urea Values

Max 1 mg/kg
Max 1 mg/kg
Max 15 g/kg
Max 0.25 g/kg

Quality Check References

PH	1 % solution
Moisture (free moisture)	(AOAC) Official Methods of Analysis, 1990, 15 th Ed. 965.08 Vacuum-Desiccation Methods First Action 1965 – Final Action 1974.
Undesirable elements	AOAC Official Methods of Analysis, 15 th Ed., Cd, 974.27, As, 957.22.

Classification, packaging and labelling

UREA is packed in 50kg woven polypropylene (WPP) bags with a polyethylene inner liner.

Handling and storage

UREA must be stored under cover in a dry place to ensure a shelf life of at least 3 years.

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Replaces all previous data sheets.
English

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