



**PRODUCT INFO
& DATASHEET**

Stabilised Ureas: more nitrogen available for crop growth
Keep unwanted N loss to a minimum for maximum benefit
SICUREA®46N & SICUREA®38N + 7.5 S
Granular ureas with urease inhibitor

Revised 2024

1/ Product name	SICUREA®46N	SICUREA®38N + 7.5 S
2/ Product description Formulation Form Color	Urea + urease inhibitor CO(NH ₂) ₂ NH granular green	Urea + urease inhibitor + Sulphur CO(NH ₂) ₂ +SO ₃ granular green
3/ Composition Total Nitrogen (N) - Urea Nitrogen (CO(NH ₂) ₂ NH) - Ammoniacal N (NH ₄ -N) NBPT (urease inhibitor) Sulphur Trioxide (SO ₃) water soluble Sulphur (S) water soluble	46% 46% - 0.25% -	38% 31.40% 6.60% 0.25% 18.75% 7.5%
4/ Chemical & Physical properties Specific gravity (sg) Bulk density Average granule diameter Sieve analysis Free moisture content Neutralising value	740 kg/m ³ 780 kg/m ³ 3.2mm+/-0.2mm (D50) max. 0.3% -46 (agricultural land) -37 (grassland)	780 kg/m ³ 820 kg/m ³ 3.2mm+/-0.2mm (D50) max. 1%<1.6mm max. 0.3%

5/ Packing

- big bags of 500 kg (for trucking only)
- 40 kg wpp + pe SICO bags (loose bags without pallets)
- a) SICUREA 46N: about 20.8 MT/20' fcl
- b) SICUREA 38N + 7.5 S:
- 40 kg = about 22 MT/20' fcl
or 20 kg partially transparent SICO pe bags, about 20.8 MT/20' loose bags or 18 MT/20' bags on pallets
- bulk in container or bulk truck

6/ Remark

SICUREA is ao. used a lot in fertilisation of rice, to avoid the volatilisation of Nitrogen (N) while remaining on the soil during some weeks after dry seeded rice and before being put under water.

7/ Sales Rationale

Every soil contains the urease enzyme.
 As soon as urea is applied this enzyme breaks down urea into ammonium.
 During this conversion there is a local increase in the pH around the granule.
 If this pH level exceeds 7, part of the ammonium formed is converted into ammonia gas which evaporates, or in other words volatilises.

The degree of volatilisation depends on the soil pH, temperature and moisture.
 Under European conditions the volatilisation is on average 26% for surface application.
 An urease inhibitor prevents this volatilisation.

SICUREA is urea that has been treated with an urease inhibitor (NBPT).
 As soon as SICUREA is applied the urease inhibitor delays the conversion of urea into ammonium.
 As a result, the pH around the granule stays below pH 7.

The minimal pH rise means that the nitrogen stays in the stable ammonium form which does not volatilise.
More nitrogen is available for crop growth.

SICUREA delivers more value for money per kg real crop-available nitrogen than untreated urea.
 Your investment in nitrogen delivers the maximum benefit to crop growth and limits the environmental impact as well !



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