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	Urea + urease inhibitor	Urea + urease inhibitor + Sulphur
Formulation	$CO(NH_2)_2NH$	$CO(NH_2)_2+SO_3$
Form	granular	granular
Color	green	green
3/ Composition		
Total Nitrogen (N)	46%	38%
- Urea Nitrogen ($CO(NH_2)_2NH$)	46%	31.40%
- Ammoniacal N (NH_4-N)	-	6.60%
NBPT (urease inhibitor)	0.25%	0.25%
Sulphur Trioxide (SO_3) water soluble	-	18.75%
Sulphur (S) water soluble	-	7.5%
4/ Chemical & Physical properties		
Specific gravity (sg)	740 kg/m^3	780 kg/m^3
Bulk density	780 kg/m^3	820 kg/m^3
Average granule diameter	3.2mm+/-0.2mm (D50)	3.2mm+/-0.2mm (D50)
Sieve analysis		max. 1%<1.6mm
Free moisture content	max. 0.3%	max. 0.3%
Neutralising value	-46 (agricultural land) -37 (grassland)	

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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