

NITROGEN RETENTION

Green Urea

Applied on the soil surface to help reduce nitrogen losses through volatilisation.

Get in touch



Why Green Urea

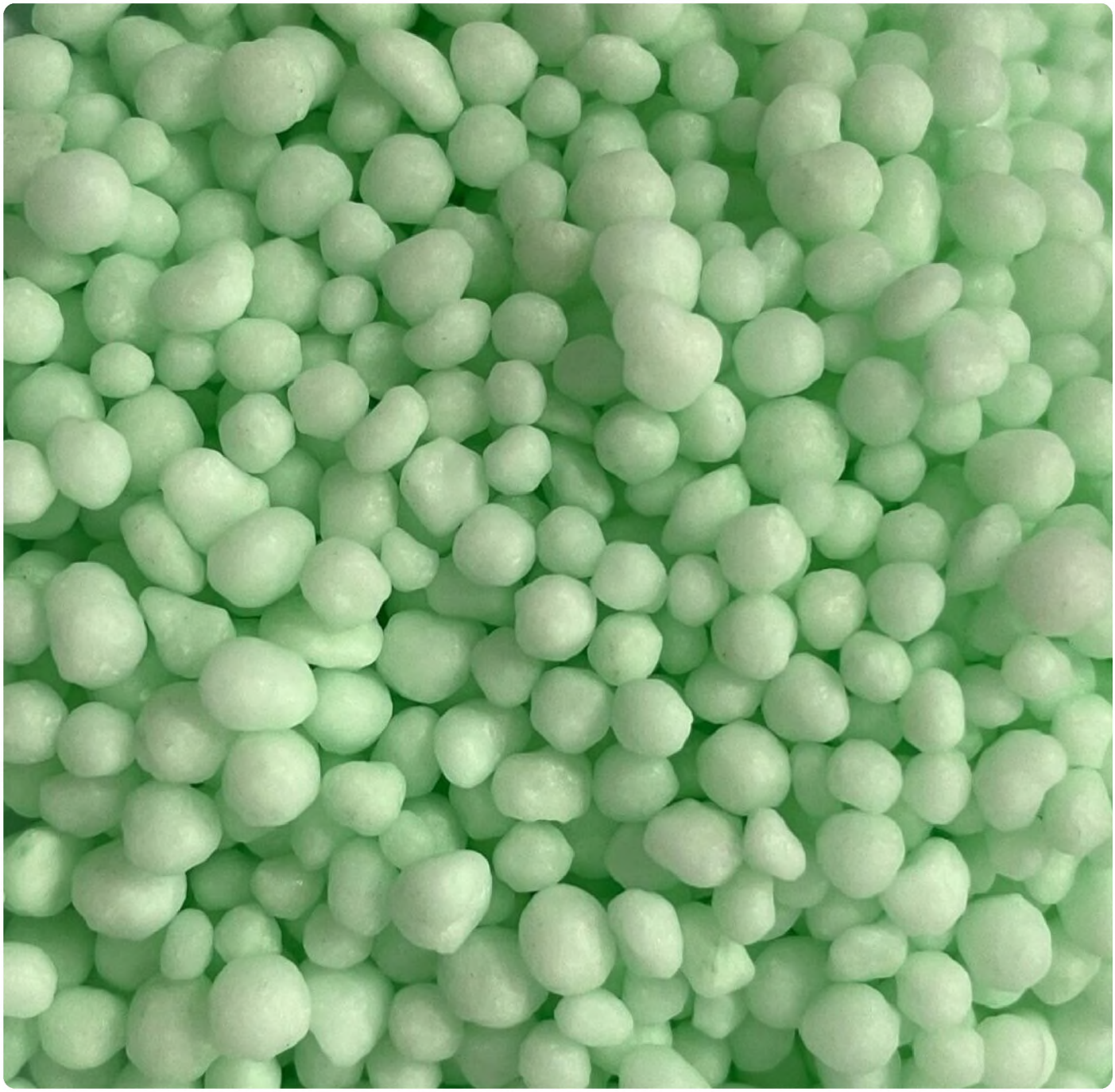
More efficiency. More flexibility. More productivity.

Green Urea NV is an enhanced efficiency fertiliser designed to support nitrogen retention and improve nutrient performance.

Developed for Australian farmers who want to reduce nitrogen losses, improve efficiency, and maximise return on investment.

A proven urease inhibitor, Green Urea NV keeps nitrogen where it belongs, in the soil, feeding your crop or pasture.

Our extensive field trials show up to 89% reduction in nitrogen volatilisation losses, delivering greater nitrogen use efficiency, stronger yields, and improved profitability.



Overview

Standard urea can lose up to 33% of applied nitrogen through volatilisation. Green Urea NV slows this process by inhibiting the enzyme urease, meaning more nitrogen remains available for uptake.

Green Urea NV is Incitec Pivot's patented urease inhibitor (NBPT + unique solvent package) that is coated onto Granular Urea and slows the breakdown of urea in the soil. This reduces nitrogen loss due to volatilisation, ensuring more nitrogen remains available for plant uptake.

Standard urea rapidly converts to ammonia gas. Volatilisation is the loss of nitrogen as ammonia gas (NH3) when urea breaks down on the soil surface before being incorporated by rain or irrigation.

Made for Australian Farmers
Green Urea NV has been proudly developed by Incitec Pivot and formulated specifically for Australian soils and farming conditions.

Our coating technology ensures even coverage, deeper penetration, and reduced dust. It uses an NMP-free formulation designed to deliver safe, consistent performance.

When stored correctly, the coating maintains its effectiveness for more than 12 months.

Green Urea NV is backed by more than 10 years of Incitec Pivot research and has been extensively trialled across the East Coast. Across both pasture and cropping systems, trials have shown consistent reductions in ammonia loss of 71–78% compared with standard urea.

Features and benefits

1

Reduction Nitrogen Losses

More of the nitrogen stays where you need it, supporting crop and pasture growth instead of disappearing into the atmosphere. Green Urea has up to 89% less volatilisation compared to standard urea.

2

More Flexibility in Application

Provides up to 14-day application flexibility ahead of rain. This means you can spread when it suits your operation, without waiting on a narrow rainfall window.

3

Reduction of Greenhouse Gas Emissions

Decreases nitrous oxide emissions, a greenhouse gas with 265 times the warming potential of CO2
Supports on-farm environmental compliance and sustainability goals.

4

Maximise Return on Investment

Based on Incitec Pivot field trials and analysis our economic modelling shows that using Green Urea NV delivers a strong return on investment by reducing nitrogen losses and improving fertiliser efficiency. Results will vary depending on nitrogen pricing, soil type, and seasonal conditions. Based on Incitec Pivot field trials and analysis.

The Science

Proven in the field

Green Urea NV has been extensively trialled in 2024 under Australian farming conditions by the Incitec Pivot Research & Development team, in collaboration with the Incitec Pivot Agronomy team. These trials confirm its effectiveness in reducing nitrogen losses and improving nitrogen efficiency across a wide range of soil types and climates.

Field trials conducted by Incitec Pivot across 19 locations demonstrated reductions in ammonia volatilisation of up to 89%, confirming strong nitrogen retention and higher efficiency.

This technology has been developed by science and is backed by our Nutrient Guarantee – ensuring confidence in every tonne delivered.

View Full Trial Report (2024)

Backed by our Nutrient Guarantee

With our Nutrient Guarantee, you can trust smart fertilisers to deliver exactly what's on the label. Routine quality control testing across our network ensures the specifications are met every time, providing reliable, consistent, high-quality products that support sustainable productivity.

Calculate your ROI with Green Urea NV

Try the Green Urea NV Value Calculator and see how much you could save by using Green Urea NV:

- Estimate your nitrogen losses from standard urea
- Compare the investment vs. return of upgrading to Green Urea NV
- Get a customised assessment based on your crop and conditions

1.) What is the soil texture?

Loam | Sand | **Clay**

2.) What is the soil surface pH (1:5 water)?

6.5 - 7.0

3.) What is the Cation Exchange Capacity (CEC) of the soil surface (0-10cm)?

11 - 20

4.) What is the Moisture Content (MC) of the soil surface layer (0-10cm)?

Wet | **Good** | Moist | Dry

5.) Estimated time (days) to accumulate effective rainfall / irrigation (Step 6) or until incorporation (cultivation) after urea granules have dissolved?

5

3 14

6.) Size of incorporation event (rainfall / irrigation - mm) or (cultivation - incorporated)?

<16 mm

7.) What is the expected average temperature for the 2 weeks after urea application?

< 17°C | **17 - 24°C** | > 24°C

8.) What is the likely average wind speed for the 2 weeks after urea application?

10 - 15 km/hr

9.) Target crop for Urea application?

Wheat

10.) What is the crop growth stage?

Pre-plant

11.) What quantity of Urea did not land on soil surface (resting on stubble) (%)?

20

12.) What rate of Nitrogen is to be applied (kg/ha)?

46

↑26.5 ROI Increase

$137.66/ha Estimated Production Gain

$132.66/ha Net Additional Value

13.) Estimated ex farm grain price ($/MT)?

500

14.) Expected grain protein without Nitrogen application

Low | Medium | High

Calculate

Reset

Estimated Nitrogen loss

19.7 kg N/ha | **43%**

15.) What is the spread cost of urea ($/MT)?

800

$34.20/ha
Estimated value of lost Nitrogen

$5.00/ha
Additional cost of GREEN UREA NV

Related Resources

Labels & SDS

26 August 2026
Green Urea NV Product Guide
PDF
View | Download

26 August 2026
Green Urea NV Trial Report 2024
PDF
View | Download

17 June 2025
Green Urea NV: made for Australian soil
View

27 Ju
Gr IPI nit

Do you have the information to make confident plant nutrition decisions?

Visit our Resource Centre to explore practical guides, technical resources and expert insights to support your plant nutrition decisions.

Learn More

Want to solve a nutritional problem, or learn more?

Complete your details to receive a call back, and talk to one of our Agronomists or Fertiliser experts.

First Name*

Enter first name

Last Name*

Enter last name

Email Address*

Enter email address

Phone Number*

Enter phone number

Company

Enter company name

State

Select state

Your Role

- Farmer
- Agronomist or Advisor
- Farm Services
- Other (please specify)

Crop Type


About Us
Products
Productivity Services
News
Resource Centre
Careers
Find a Location
Contact Us