



Smarter Nitrogen for Australian Farmers

Green Urea NV[®] Product Guide



Why Choose Green Urea NV®?

Green Urea NV® is an enhanced efficiency fertiliser designed to minimise nitrogen losses, improve efficiency, and maximise return on investment. With proven urease inhibitor technology, it helps keep nitrogen where it belongs – in the soil, feeding your crop or pasture.

Standard Urea vs. Green Urea NV

Feature	Standard Urea	Green Urea NV
Volatilisation Loss	Up to 30% lost to the atmosphere	Up to 82% less loss than standard urea
Application Timing	Must be incorporated within 2 days	More flexibility to apply up to 14 days before rain
Nitrogen Efficiency	More nitrogen is lost to volatilisation, meaning less reaches the crop. Higher application rates may be needed to compensate.	Reduces nitrogen losses, allowing for better yield potential at the same nitrogen rate or maintaining yields with less nitrogen.

How Green Urea NV Works

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

- 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.
- Standard urea rapidly converts to ammonia gas.
- Green Urea NV contains a urease inhibitor (NBPT), which slows the breakdown of urea, reducing volatilisation losses.

Key Benefits

- Green Urea NV is coated using technology that ensures uniform application, deeper penetration into urea granules, and reduced dust formation, making it easier to handle and spread.
- Reduces volatilisation loss by up to 82%, keeping more nitrogen in the soil.
- More flexible application timing – apply ahead of rain without immediate incorporation.
- Higher nitrogen uptake efficiency.
- Extended shelf life and storage stability – remains effective for at least 12 months.
- No immediate use required – unlike other imported products, it does not need to be used immediately after purchase.
- Proven infield trials on unique Australian soils with measurable yield and economic benefits.



Made for Australian Farmers

Green Urea NV was developed over the past 10 years by the IPF Research & Development and Agronomy teams, for Australian growers, with Australian conditions in mind helping you get the most from every kilogram of nitrogen.

- Proudly developed, tested, and patented in Australia
- Designed for Australian climate and soils
- Backed by years of IPF agronomic research

Application Guidelines

Green Urea NV can be applied to a range of crops and pastures, and can be applied ahead of rainfall or irrigation, reducing nitrogen loss risks compared to standard urea. Green Urea NV is specifically designed to reduce nitrogen losses and improve efficiency in the following conditions:

- **Surface-Applied Urea** – Regardless of soil type, the soil pH under the urea granule will increase, converting ammonia to ammonia gas and leading to nitrogen loss. Green Urea NV slows this pH rise, reducing volatilisation losses.
- **High Organic Matter Soils** (Pasture Thatch, Crop Residues, Stubble, Trash) – Organic material can trap urea granules above the soil surface, exposing them to volatilisation. Green Urea NV slows urea breakdown, helping retain nitrogen until it is incorporated.
- **Hot or Windy Conditions** – High temperatures and wind accelerate nitrogen loss through volatilisation. Green Urea NV helps stabilise nitrogen and retain more in the soil.
- **Low Rainfall or Dew Conditions** – When urea granules dissolve but are not incorporated deep enough, volatilisation risk increases. The amount of rainfall needed to reduce losses varies by soil type: sandy soils require >10mm, loam soils >16mm, and clay soils >25mm.
- **Open Canopy or Bare Soil** – In exposed paddocks with little ground cover, nitrogen loss is higher due to direct sun and wind exposure. Green Urea NV helps retain more nitrogen in these conditions.

Proven Performance

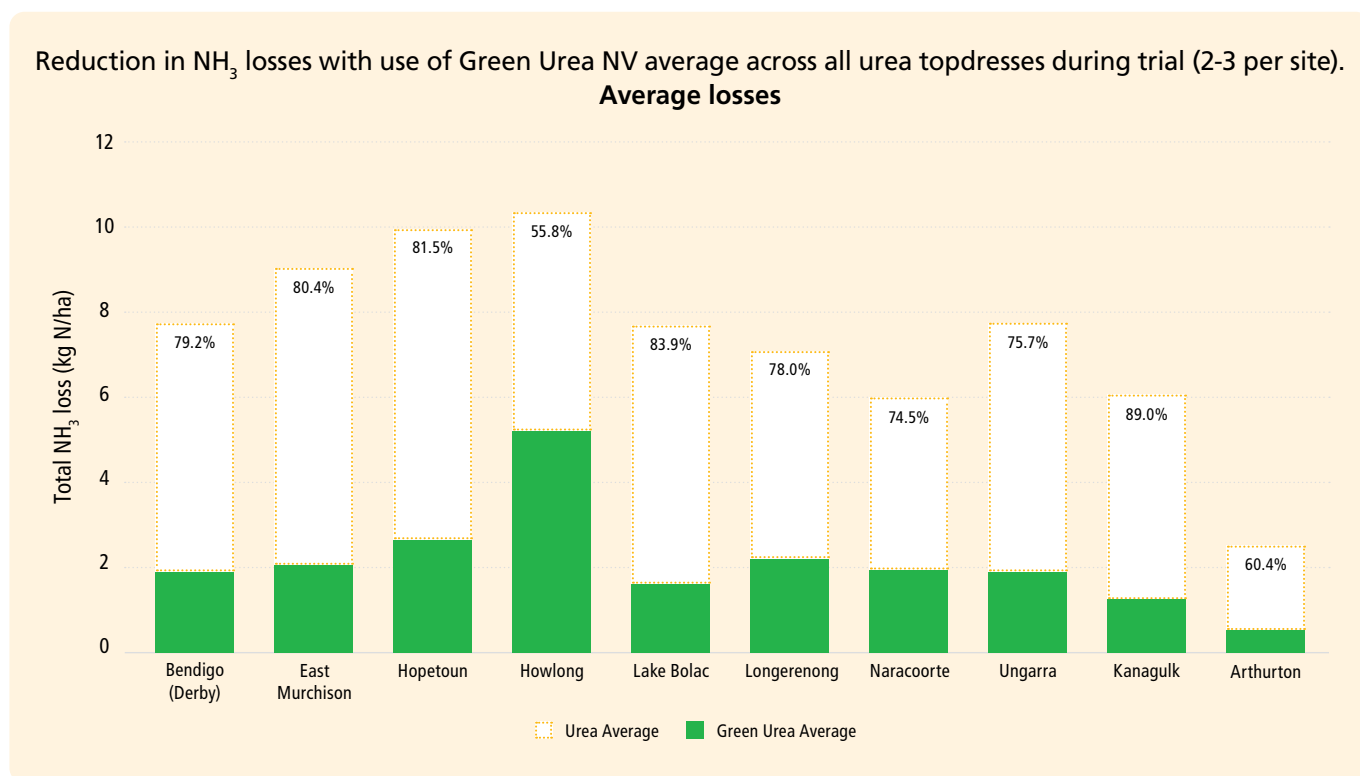
Green Urea NV has been extensively trialled in 2024 under Australian farming conditions by the IPF Research & Development team, in collaboration with the IPF Agronomy team. These trials confirm its effectiveness in reducing nitrogen losses and improving nitrogen efficiency across a wide range of soil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

How the Trials Were Conducted:

- Trials were carried out at 15 sites across cropping and pasture systems, covering a diverse range of Australian soil types and locations.
- Each site received two to three topdress applications between June and August 2024.
- NH_3 volatilisation was measured using closed PVC chambers, comparing standard urea to Green Urea NV at an application rate of 46 kg N/ha.

What the Trials Found:

- Green Urea NV consistently reduced NH_3 losses by up to 89% compared to standard urea.
- Average reductions were 77%, 82%, and 76% for June, July, and August applications respectively.
- These findings confirm that Green Urea NV is proven to reduce nitrogen losses under real Australian conditions, helping farmers retain more nitrogen for crop and pasture production.



For detailed trial results, refer to the *Green Urea NV® Trial Report 2024* available available at www.incitepivotfertilisers.com.au

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