

eNtrench™

Applying in Sugarcane

NITROGEN STABILISER

What is eNtrench™ Nitrogen Stabiliser ?

- eNtrench Nitrogen Stabiliser affects the metabolism of the soil bacteria *Nitrosomonas* spp; significantly slowing its conversion of soil nitrogen from the precious ammonium (NH_4^+) to the easily lost nitrate (NO_3^-)
- eNtrench thereby stabilises applied nitrogen to minimise losses, protecting your fertiliser investment and maximising nitrogen availability for your crop
- eNtrench can be used with current cane growing practices

Best Use Guidelines

Including eNtrench into the farm fertiliser program will stabilise applied nitrogen for 4-10 weeks by keeping the nitrogen in the ammonium form (which cannot be lost through denitrification and is less susceptible to leaching). This reduces nitrate losses that occur after irrigation or successive rain events. High rainfall often occurs in cane growing areas in northern Australia.

Typically nitrification of ammonium occurs in aerobic soils that are warm and wet. Soil moisture and temperature are the most important factors that determine the rate of conversion of ammonium in the soil. Warm, moist soil result in more rapid conversion.

Other factors affecting the rate of conversion include the level of *Nitrosomonas* spp. present in the soil, soil pH and the amount of nitrogen available.

eNtrench will be most effective when applied with fertiliser in areas that experience heavy rainfall or regular irrigation. The length of stabilisation will also vary with soil temperature, soil moisture, the amount of nitrogen applied and rainfall.

Application

Use Rates: eNtrench is used at 2.5 L/ha. No more than 5 L/Ha should be used in a year.

Water Rates: eNtrench is a liquid formulation. Adequate water and/or liquid nitrogen fertilisers should be used to ensure a consistent mix of the products (50–200 L water/ha with direct injection systems; 400-600 L/ha liquid fertiliser ie. UAN).

Application Equipment

eNtrench is most effective when placed close to or with the nitrogen fertiliser.

eNtrench can be mixed and applied as an in-furrow treatment or applied to the soil surface.

Above ground applications must be incorporated with cultivation or with 12.5 mm (or more) rain within 7-10 days of application. As eNtrench inhibits soils bacteria, it must be in the soil profile to be effective at stabilising the applied nitrogen.



Left: In-furrow injection using a stool splitter when fertiliser is applied.

Below: Stream nozzle or dribble bar application prior to bed formation.





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Above: Broadcast application using a boom spray

Compatibility

eNtrench is compatible with most herbicides, insecticides and liquid fertiliser products, including Confidor® Guard and UAN.

When mixing with Confidor Guard maintain constant agitation and DO NOT leave the spray mix to stand overnight.

For a list of compatible products consult your local Dow AgroSciences representative.

For more information contact your local Dow AgroSciences representative on TOLL FREE 1800 700 096 or visit www.dowagrosciences.com.au

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Key Points

- eNtrench stabilises applied nitrogen to minimise losses - protects your fertiliser investment
- eNtrench maximises nitrogen availability
- eNtrench can be used with current cane growing practices

Use rate:	2.5 L/ha
Application timing:	Before, or at application of nitrogen fertiliser. Surface applied entrench must be incorporated with a light cultivation or a minimum of 12 mm or rain or irrigation.
Water volume:	50–200 L water/ha 400-600 L/ha liquid fertiliser ie. UAN
Nozzles:	All conventional nozzles
Maximum number of doses:	Do not apply more than 5 L/ha per year
Active ingredient:	200 g/L nitrapyrin
Formulation:	CS Capsule Solution (Microencapsulation)
Pack size:	20 L (8 Ha pack)



Confidence in a drum