



SUSTAIN RANGE

What is the SustaiN range?

The SustaiN range of products has been developed to provide a reliable source of nitrogen to boost pasture and crop growth. Each product contains AGROTAIN® nitrogen stabiliser, which reduces nitrogen loss by volatilisation, ensuring more nitrogen is retained in the soil for plant use.

SustaiN products have been formulated for use as standalone nitrogen fertilisers, and should not need to be blended with other products. However, if necessary, they may be blended with potash, DAP or RPR without any adverse reaction. They should not be blended with Sulphurgain, Serpentine Super, Pasturezeal G2, Superten, lime or dolomite. Care should be taken if mixing with any other fertilisers.

When stored correctly, SustaiN products remain free-flowing and granular.

Advantages of SustaiN

Retains more nitrogen: With SustaiN, on average, around 50% less nitrogen is lost to the atmosphere by volatilisation,

Product	N (%)	P (%)	K (%)	S (%)
SustaiN	46.0			
SustaiN 15K	32.2		15.0	
SustaiN 20K	27.6		20.0	
SustaiN 25K	23.0		25.0	
SustaiN Ammo 30N	30.5			14.0
SustaiN Ammo 36N	35.8			9.2
SustaiN S Boost	39.7			8.6

compared to standard urea. This nitrogen is retained in the soil, where it can be used by plants.

Grows more grass: In pastoral settings, the typical amount of nitrogen lost by volatilisation if urea is used is 10–20%. Since SustaiN halves this loss, on average, the additional nitrogen can be used for plant growth. Research has shown that, over a wide range of conditions, the average increase in pasture yield is 5% when using SustaiN instead of urea.

Easy application: With SustaiN nitrogen fertilisers, there is no need to wait until rain is imminent before you apply them, because the active ingredient—AGROTAIN® nitrogen stabiliser—slows down the natural biological process that causes volatilisation. If 5–10 mm rainfall isn't expected within 8 hours of your nitrogen application, use a SustaiN product to reduce volatilisation losses and retain more nitrogen in the soil for plant use.



FIGURE 1

SustaiN has evenly sized, pale green granules, sized between 2 and 4 mm in diameter

Less loss at high rates: At higher rates of nitrogen, such as those used when side dressing crops, volatilisation losses can be even greater, e.g. typical losses for maize side dressings would be 20-30%, if the nitrogen was broadcast. Using Sustain products will reduce this loss, which means lower rates can be applied, since more of the nitrogen will be retained for plant uptake.



Sustain

Uses: Sustain is the flagship product of the Sustain range. It can be used in any situation where urea would typically be applied.

Sustain should be regarded as preferential to urea in situations where there is a high risk of loss of nitrogen by volatilisation.

Use on pasture

- Sustain is the preferred choice if there is any uncertainty around rainfall when nitrogen is to be spread. Unless 5-10 mm of rain will fall within 8 hours of the nitrogen application, Sustain will be a better choice than urea
- If soils are moist and rainfall is not certain, volatilisation losses will be even greater. Sustain is the preferred option in this case
- Low pasture covers (<5 cm) increase the risk of nitrogen loss by volatilisation. Sustain is the preferred option in this case
- Windy conditions will also enhance losses by volatilisation. If nitrogen needs to be spread in these circumstances, use Sustain, especially if there is any uncertainty about rainfall

Use on maize crops

- Where nitrogen side-dressings are to be broadcast, rather than knifed in, Sustain should be considered. At the high rates of nitrogen required for maize crops, volatilisation losses in the order of 20-30% of the nitrogen applied can be expected, but they can exceed this in some circumstances. Using Sustain will halve these losses, on average
- If using Sustain on maize crops for broadcast side-dressing, lower rates will be required than if urea is used

Use on other crops

- Any crop that has an open canopy at time of side-dressing may benefit from the use of Sustain in preference to urea. The actual economic benefits will vary by crop and the specific conditions at the time of application

Sustain 15K Sustain 20K Sustain 25K

Uses: Sustain 15K, Sustain 20K and Sustain 25K are all designed for use when you need to boost growth and replenish potassium levels at the same time.

- Use on dairy farms to maintain more even herbage potassium levels by applying little and often
- Particularly useful on soils prone to potassium leaching, e.g. pumice, sands and coarse-textured soils
- Use on hay and silage paddocks after harvest. Removal of hay and silage results in large amounts of potassium being taken off the land, especially if the conserved feed will not be fed out on the same paddocks.
- Avoid applying on dairy farms during the calving period.

Sustain S Boost

Uses: Sustain S Boost contains chips of highly compressed, fine elemental sulphur, plus urea protected from volatilisation losses. This makes it an ideal product to use when you want to boost pasture growth and provide a long-term supply of sulphur that will be slowly released over the following year.

- Use on effluent blocks where there is a tactical requirement for nitrogen and sulphur
- Use on dairy farms where phosphate levels are high (and no maintenance phosphate fertiliser is required), but where soil sulphur levels need maintaining
- Use to boost autumn feed levels going into winter
- Use where high rainfall could result in soil sulphur levels declining over autumn and winter
- Use on dry stock farms where phosphorus levels are adequate, but where production gains can result from tactical applications of nitrogen and sulphur

Sustain Ammo 30N, Sustain Ammo 36N

Uses: Sustain Ammo 30N and Sustain Ammo 36N are both ideal for promoting growth in spring pastures that might otherwise be limited by sulphur availability.

- Use on soils with poor sulphate retention capacity (e.g. pumice and sedimentary soils)
- Use on soils that experience high rainfall
- Use instead of Sustain in spring if herbage sulphur levels are below 0.3%

