

# PastureSure

## What is the PastureSure range?

The PastureSure range combines our two most sustainable products: SustaiN and SurePhos, to make available a range of nitrogen, phosphorus, potassium and sulphur blends for all New Zealand farms.

The combination of SustaiN and SurePhos helps reduce nitrogen and phosphorus losses to the environment respectively. SustaiN achieves this in the form of reducing gaseous ammonia volatilisation, whereas SurePhos's slow release nature reduces the risk of phosphate loss via leaching and runoff. Not only this but these blends are designed to overcome the compatibility challenges associated with trying to blend urea-based nitrogen products with superphosphates.

## Features of PastureSure products

- PastureSure products all contain phosphate that is up to 23% water soluble and 70% citric acid soluble. This means the product range has a slower phosphate release profile, gradually releasing it into the soil. This slower release helps reduce phosphate loss to the surrounding environment. The release profile, however, is fast enough to meet plant requirements over the growing season
- The sulphate sulphur in PastureSure products is readily available for plant uptake
- PastureSure 15S also contain elemental sulphur. This is resistant to leaching and is slowly converted into sulphate sulphur, which can be used by plants
- The nitrogen in PastureSure products is in the form of SustaiN, which can reduce nitrogen losses as ammonia by 50%
- Where products contain potassium, this is in the form of muriate of potash (potassium chloride). This is the most cost-effective form of potassium for use in pastoral settings, but should be avoided on chloride-sensitive crops

- PastureSure products also supply calcium. Although calcium deficiency in soils is virtually unknown in New Zealand, regular additions help offset losses from leaching
- The bulk density of PastureSure products ranges between 0.85 and 1.2 kg/litre, depending on the specific product
- The moisture content of PastureSure products is 7% or less
- PastureSure products contain less than 270 g fluorine/kg P and less than 280 mg cadmium/kg P
- PastureSure products may be groundspread or applied by aerial top-dressing. They are not suitable for drilling

## Storage and compatibility

PastureSure products are physically compatible, which will flow and spread well. Chemically, PastureSure won't react as is the case with urea and superphosphate. However, they should be applied within 24 hours. This is to avoid the break down of agrotain, the active ingredient in SustaiN that reduces ammonia volatilisation.

## Using PastureSure products

There are a variety of products available in the PastureSure range. The products are intended as complete solutions for specific on-farm needs and should not require the addition of any other products, except micronutrients. The exception to this is magnesium - where a higher rate of magnesium is needed, a product from the Pasturemag range should be considered.



**The MOP range** - three standard PastureSure blends deliver increasing amounts of muriate of potash (MOP), along with the other macro-nutrients. These products are ideal for use as spring maintenance fertilisers on dairy farms. As with any MOP fertiliser, application should occur after calving has finished, to avoid the risk of animal health issues. Applying MOP in spring (but after calving) helps to support clover growth. The application rate for these PastureSure products will depend on individual farm requirements, however could be 300-400 kg/ha.

Product	N	P	K	S	Mg	Ca
PastureSure 5K	9.5	5.4	5.0	6.6	1.4	15.2
PastureSure 10K	7.6	4.9	10.0	6.0	1.3	14.0
PastureSure 15K	7.6	4.2	15.0	5.1	1.1	11.8

**The sulphur range** - one standard PastureSure blend is based on its sulphur content. This product, PastureSure 15S, supplies elemental sulphur as well as sulphate sulphur. Products that contain elemental sulphur are particularly useful as maintenance fertilisers on sheep and beef farms. They may be applied in spring or autumn, and typical application rates would be 300-400 kg/ha.

Product	N	P	K	S	Mg	Ca
PastureSure 15S	9.5	5.9	-	15.0	0.8	15.8

**Maintenance fertilisers** - there are three products in the PastureSure range that have been designed to meet maintenance fertiliser requirements often encountered in New Zealand. PastureSure Boost is most frequently used as a spring maintenance fertiliser on sheep and beef properties. Including nitrogen in the mix helps to boost pasture growth, providing feed to finish young stock. Typical application rates would be 250-400 kg/ha.

PastureSure Impact may be used on dry stock or dairy farms, according to need. It may be used in spring or autumn. Typical application rates for this product would be 250-300 kg/ha.

PastureSure Balancer tends to be used as a spring maintenance fertiliser on dairy farms that have a low magnesium requirement. Typical application rates vary between 300 and 500 kg/ha.

Product	N	P	K	S	Mg	Ca
PastureSure Boost	9.1	6.3	-	7.6	1.6	17.6
PastureSure Balancer	6.0	5.8	6.0	7.1	1.5	16.5
PastureSure Impact	12.1	5.7	-	7.0	1.5	16.2

