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Amgrow Australia Pty Ltd

Product Information Sheet

NutriSmart Microbial Fertiliser

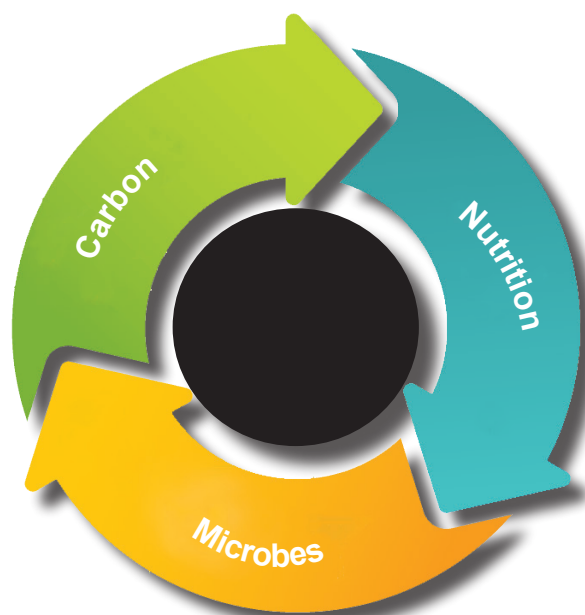


Nutrient Analysis (w/w):

N	P	K	Ca	Mg	Cu	Zn	Fe	Mn	B	Mo	Co	Si	OM
0.5%	0.08%	0.6%	3.1%	0.5%	33ppm	107ppm	1.4ppm	356ppm	20ppm	1.1ppm	20ppm	19%	35%

NutriSmart is a microbial fertiliser that relies on the activity of specific microbes and functional yeasts not normally found in agricultural soils. They are applied to the soil via a carbon/starch granule which provides both an environment and independent food source. Because they are not native to the soil and given they have their own food source there is no competitive limitation on their activity with other native soil micro-organisms.

The technology combines the benefits of microbial activity and carbon to improve nutrient uptake efficiency (CEC) in plants leading to a potential reduction in chemical fertiliser inputs. The active ingredients of the product comprise two major components; beneficial microbes and microbial activators.



Benefits:

- Increases the humus/organic matter content in soil.
- The dual action of microbe and carbon (50%) content increases the soil cation exchange capacity (CEC).
- A certified organic input: Australian Organic Certification Number: 10325A1.
- Improves soil biological activity.
- Enhances mycorrhizae colonisation of root systems and hastens plant development.
- Can be blended with traditional fertilisers for value added custom blends.
- Naturally derived and environmentally friendly eco fertiliser.
- NutriSmart microbes and yeasts survive in the soil for around 150 days.
- Available in 3.5mm (350 SGN) granule.

Pack size:

Available in 20kg and 1T bulk bags





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NutriSmart Microbe Mode of Action

Lactic Acid Bacteria

Including Lactobacillus, Leuconostoc, Lactococcus and Pediococcus spp - 10,000,000 cfu/kg

When inoculated into soil amended with organic materials, these bacteria enhance decomposition and the release of plant nutrients and increase soil humus formation.

Photosynthetic Bacteria

Including Rhodospseudomonas and Bradyrhizobium spp - 100,000 cfu/kg

These bacteria induce resistance against plant virus' whilst promoting plant growth by solubilising insoluble nutrients. This particular type of bacteria is so efficient, that it creates more sugars than it needs, releasing them for use by nearby plants and other micro-organisms.

Actinomycetes Bacteria

Including Actinomyces and Streptomyces spp - 1,000,000 cfu/kg

These bacteria are known to improve the availability of nutrients, minerals, enhance the production of metabolites and promote plant growth regulators. They improve soil health by formation and stabilization of organic matter, humus and nutrient recycling.

Mycorrhizal Fungi

Including Trichoderma, Aspergillus, Penecillum, Mucor and Rhizopus spp - 3,000,000 cfu/kg

Assist plants to access soil reserves of phosphorous, macro-nutrients such as calcium, magnesium, potassium and nitrogen, as well as micro-nutrients such as zinc, copper and iron. This group of fungi help plants to combat disease in several ways, such as colonising the plant's roots and penetrating the root cells with their branching structures, excluding and protecting the roots from pathogens. This fungi group also release several antibiotic substances into their rhizospheres.

Yeast

Including Saccaromyces, Debaromyces, Torulopsis and Rhodotrula spp - 100,000 cfu/kg

The addition of live yeast to fertilised soil, will promote substantial increases in the nitrogen and phosphorus content of roots and shoots, resulting in greater shoot biomass. Yeasts perform important functions within the soil in relation to nutrient cycling, disease suppression and water dynamics, all of which help plants become healthier and more vigorous.

Directions for application (refer to product label for more deailed instructions)

Crop/Situation	Broadcast Soil Rate (kg/ha)	Critical Comments
Fruit & nut trees / vines	150-200	Broadcast under tree/vine canopy annually in spring. For best results blend with compost/mulch and apply, or broadcast compost/mulch on top of NutriSmart. Use the lower rate on young trees and vines. For new plantings apply 250 grams per hole, mix with soil during backfilling.
Vegetable crops & sugar cane	125-185	Apply as a broadcast prior to land preparation, or add to starter fertiliser blends (15 to 50% concentration) and apply at planting.
Pastures	125-200	Apply as a broadcast prior to land preparation at planting. Can be broadcast onto pastures after grazing or cutting. Can be added to fertiliser blends (15 to 50% concentration) being top dressed.
Broadacre crops (cereals, cotton, corn, beans, peas, etc)	75-100	Apply as a broadcast prior to land preparation at planting or blend with starter fertilisers at concentrations from 15 to 50%.

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Before using, always read the product label. More information: Contact your local Barmac distributor