



Blue Pacific
MINERALS

Plant+Soil+Turf



CLEVER *by* NATURE



PERMA GRO™

SOLO



NATURAL MINERAL ADDITIVE THAT IMPROVES THE PERFORMANCE OF SOILS



SOIL
STRUCTURE



SOIL
HEALTH



MOISTURE
RETENTION



PLANT GROWTH
& NUTRIENTS

PERMAGRO™ SOLO is a natural mineral additive used to improve the performance of the substrate and promote excellent growing conditions.

Its Cation Exchange Capacity (CEC) improves nutrient and water management through retention and slow release mechanisms.

Primary sectors:

- Lawn & Turf Care
- Landscape & Garden
- Horticulture
- Viticulture

FEATURES:

- Improves soil structure
- Enhances root structure development
- Improves utilisation of nutrients
- Improves water management



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Why use PERMAGRO™ SOLO?

- Mixes with soils, potting mix, seedling mix, garden beds, compost, mulch and plantings
- Promotes rapid germination, strong root development
- Retains and regulates moisture in the soil profile
- Reduces fertiliser use by retaining nutrients such as Ammonium (NH₄) Nitrogen (N), Potassium (K), Calcium (Ca) and Magnesium (Mg) making them available to the plant
- Reduces nitrate leaching and adds to environmental protection
- BioGro Certified Input for Organics
- Permanent addition to the soil profile, does not dissolve away
- Binds heavy metals
- Capital investment providing short, medium and long term benefits

Water retention

Due to the high porosity of its crystalline structure, PERMAGRO™ SOLO can retain molecules of water up to 80% of its weight. Water, in its pores, can be steadily evaporated or reabsorbed without damaging the crystalline structures.

Cation exchange capacity (CEC) for nutrient retention

The negative charge of PERMAGRO™ SOLO attracts positively charged cations such as NH₄, N, K, Ca and Mg where they are ionically bonded and therefore hold and release the nutrient to the plant when required.

Ammonium is the most important cation to be bound. The tiny root hairs of the plant generate acid hydrogen ions (H⁺) which exchanges with the ammonium ion bound to the lattice framework.

Permanent

With a MOHs hardness of 3, PERMAGRO™ SOLO aids in aeration and drainage of the soil, resists compaction and doesn't break down unlike lime as an example.

Binds heavy metals

Using cation exchange PERMAGRO™ SOLO bonds a range of heavy metals such as manganese, zinc, nickel, iron, cobalt, copper, lithium, lead, barium and rubidium.

USES FOR PERMAGRO™ SOLO

Turf, garden beds, compost heaps, mulch, planting, potting mix.

WHAT IS PERMAGRO™ SOLO?

Bulk density	0.45 - 0.62gm / cm ³
Porosity	60%
Slurry pH	8.65 (10% aq. suspension)
CEC	100 - 120meq / 100gm
Surface area	>200m ² / gm
Pore size	~7 Angstroms
Colour	Offwhite
Absorbency	Water >80ml / 100gm
Hardness	~3 MOHs
Particle size	1 - 3mm

DOSAGE

	Dilution	Application
Agriculture	10:100	Apply prior to planting
Horticulture	10:100	Apply prior to planting

PACKAGING

18kg | 800kg

Granule Size:
1 - 3mm



March 2023

ASK US ABOUT USING PERMAWET™ TO INCREASE MOISTURE RETENTION IN YOUR SOILS.



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