



LAWN AND GARDEN FERTILISER

emerge struvite fertiliser is an excellent nutrient rich fertiliser that is 100% renewable and locally sourced. **emerge** struvite fertiliser contains 5% nitrogen, 12% phosphorus, and 10% magnesium. Struvite has low solubility and therefore provides slow release of nutrients, closely matching the natural uptake demand of plants. It has been proven to be highly effective for turf and pasture grass establishment and ongoing growth and crop yield. Because of struvite’s slow release nature it doesn’t burn leaves or plant matter like some other fertilisers are known to do.

Where does **emerge** struvite fertiliser come from?

emerge struvite fertiliser is a crystal that is chemically precipitated from the treatment process at Watercare’s Māngere Wastewater Treatment Plant. It is extracted by centrifuge and then washed. Finally it is dried and sieved. The struvite crystal forms where phosphorus, nitrogen, and magnesium are available under optimum pH conditions.

What is struvite?

Struvite is a crystal with chemical composition $NH_4MgPO_4 \cdot 6H_2O$, and is also known as magnesium ammonium phosphate. Struvite forms naturally in biological systems under alkaline conditions (high pH), commonly where organic matter decomposes in the presence of nitrogen, phosphorus and magnesium.

Struvite is considered to be a valuable alternative to rock-phosphate and urea fertilisers. So much so that European countries are now regulating requirements for it to be extracted as fertiliser from wastewater treatment plants.

emerge struvite fertiliser is tested extensively and contains no pathogens. It has very low background metal content (see below).

NZ Fertiliser Association compliance

The allowable fertiliser limits set out by the NZ Fertiliser Association are as follows:

Metal	Allowable limit	Emerge struvite fertiliser mg/kg
Cadmium	280	<1
Mercury	10	<0.6
Arsenic	75	<0.4
Lead	100	<20

Using **emerge** struvite fertiliser

emerge struvite fertiliser can be applied directly to the surface, or incorporated (spaded or ploughed) into the soil.

The following application rates are recommended:

Lawns, turf, pasture	Up to 1kg per 10m ² , or 1 Tonne per hectare
Trees and shrubs	Up to 1kg per 5m ² under the dripline

It is recommended to “water in” the **emerge** struvite fertiliser after application.

Precautions

Use **emerge** struvite fertiliser in accordance with good fertiliser practice. Please ensure it is stored in a dry place that is out of the reach of children and pets. Wash hands after use.

Where to get **emerge** struvite fertiliser

For current distributors of **emerge** struvite fertiliser contact emerge@water.co.nz