



GRANULOCK®

**USE DIRECTION
JANUARY 2024**

GRANULOCK® BIG Z

%N	%P	%K	%S	%Zn
16.1	4.3	0	16.1	10.0



ANALYSIS

Nutrient content

- Nitrogen (N) as Ammonium 16.1%
- Phosphorus (P) Water Soluble 3.6%
- Phosphorus (P) Citrate Soluble 0.7%
- TOTAL Phosphorus 4.3%
- Sulphur (S) as Sulphate 16.1%
- Zinc (Zn) as Oxide 10.0%

Heavy metal impurities

- Cadmium (Cd) 10 mg/kg (max)
200mg/kg P (max)
- Lead (Pb) 100mg/kg (max)
- Mercury (Hg) 2 mg/kg (max)

WARNING: Use of this product may result in Cadmium and/or Lead and/or Mercury residues more than the Maximum Level specified by the Australia New Zealand Food Standards Code in plant and animal products and may also result in accumulation of these residues in soils.

REGULATORY INFORMATION

This product is classified as an Environmentally Harmful Substance, UN Number 3077, Transport Hazard (DG) Class 9 (Miscellaneous) under the criteria of the IMDG if transported by Sea. This does not apply to transport by Land (Road and Rail).

GRANULOCK BIG Z

Granulock® Big Z is a granulated zinc fertiliser containing 10% zinc (Zn). It is comprised of ammonium sulphate, ammonium phosphate and zinc oxide. The ammonium sulphate and phosphate are used as a base or carrier to dilute the zinc, making application of zinc at low rates easier than where more concentrated zinc fertilisers such as Zinc Sulphate Monohydrate (33% Zn) are used. This also provides more point sources of zinc in the soil for access by plant roots.

Granulock Big Z is not offered for sale as a product. It is used exclusively as a blend ingredient. It is one of three products used by Incitec Pivot Fertilisers as a source of zinc (Zn) for dry application to the soil. The others are:

- Zinc Sulphate Monohydrate, containing 33% Zn.
- Granulock® Z - an ammonium phosphate planting fertiliser with 1% Zn.

Zinc Sulphate Monohydrate is used where zinc is applied at high rates (that are intended to last for several years) and in plants with a large stature, e.g. tree crops and sugarcane. It may also be used in planting fertilisers in crops planted at wide row spacings.

Granulock Z is a zinc enriched MAP fertiliser that contains 1% Zn. It is used at planting in crops planted at narrow row spacings, e.g. winter cereals and forage crops, and in cotton, where zinc is applied annually at rates around 1 kg/ha Zn.

Granulock Big Z is primarily used for two reasons:

- To bolster the Zn content of Granulock Z where higher rates of zinc are required.
- In place of Zinc Sulphate Monohydrate where low rates of zinc are to be applied and Zinc Sulphate Monohydrate provides too few point sources of zinc in the soil, e.g. pasture on sandy soils.

APPLICATION RATES

Pasture

In pastures, zinc is commonly top-dressed with superphosphate or Super-Potash Blends. A typical rate at which zinc (Zn) is applied on light textured sandy soils is 2 kg/ha Zn, with higher rates (4 kg/ha Zn) being used on clays.

To apply these rates of zinc, Granulock Big Z needs to be applied at 20 kg/ha on light textured sandy soils and at 40 kg/ha on heavier textured clay soils. Repeat applications are required at intervals of about 5 years, though this does vary.

Pasture – fluorine and grazing withholding periods

Granular phosphorus fertilisers, such as Granulock Big Z, and others such as Incitec Pivot SuPerfect (single superphosphate) and MAP, contain fluorine (F) as an impurity at concentrations that make them unsuitable for use as mineral supplements for livestock. If they were to be used for this purpose, fluorosis would be induced.

The amount of fertiliser (and fluorine) ingested directly from pasture after topdressing will be considerably less than that which would be consumed if these products were inadvertently used as phosphorus supplements, and grazing animals are only exposed temporarily to the fluorine.

Nevertheless, it is recommended that pasture not be grazed for three weeks or until rain or irrigation is received after topdressing with phosphorus fertilisers. Stock can be readmitted within three weeks if rain (or irrigation) has been received to wash fertiliser residues from the leaves. There is no need to wait until regrowth occurs, as is recommended with nitrogen fertilisers.

Field crops (annual application)

Zinc is often applied at planting in annual crops. A typical rate is 1 to 2 kg/ha zinc (Zn) for each crop.

In crops planted at narrow row spacings, e.g. winter cereals such as wheat and barley, it is recommended that Granulock Z be used, and extra zinc added as Granulock Big Z if necessary.

ENVIRONMENT

Marine Pollutant – zinc is very toxic to aquatic life with long lasting effects. Avoid loss to waterways.

NOTE: Blends that contain more than 8% Granulock Big Z are also classified as Marine Pollutants [Environmentally Harmful Substance, UN Number 3077, Transport Hazard (DG) Class 9 (Miscellaneous) under the criteria of the IMDG if transported by Sea].

CARE OF EQUIPMENT

This product can be corrosive to metals. Clean equipment after use and follow the manufacturer's maintenance advice.

SAFETY DIRECTIONS

Refer to the Safety Data Sheet (SDS) for more detailed safety advice. Before use, read the Product Label and the SDS. Use safe work practices and avoid contact with the eyes and skin. Avoid ingestion and inhaling dust. Protective clothing, eyewear and dust masks should always be used when dealing with this product. Observe good personal hygiene, including washing hands after use. Avoid loss of fertiliser to waterways.

WARNING

This document contains information of a general nature. Before using fertiliser seek independent agronomic advice. Fertiliser programs may need to be varied depending on the plants being grown, climatic and soil conditions, application methods, irrigation, agricultural and livestock management practices, the soil's fertility, and cultural practices. ('Unforeseen Elements')



Fertiliser may burn and/or damage crop roots or foliage. Foliar burn to the leaves, fruit or other plant parts is most likely to occur when fertilisers are foliar applied at high concentrations and/or on a regular basis, different products are mixed and sprayed together at cumulatively high rates, the water is of poor quality, or the spray is applied under hot dry conditions, e.g. in the heat of the day.

Fertiliser and supplements may affect animal health. Seek independent advice before using any supplements in livestock rations.

DISCLAIMER

As Unforeseen Elements are beyond the control of Incitec Pivot Limited, in no event Incitec Pivot Limited and its related bodies corporate be liable or accept any responsibility whatsoever for any direct, indirect, punitive, incidental, special or consequential damages (including but not limited to loss of revenue, crops and livestock), in respect of the illness, injury or death of a person, damage to property (including of a third party), or any other loss whatsoever arising out of or connected with the use or misuse of this fertiliser, or its transport, storage, handling or application. Where Incitec Pivot Limited and its related bodies corporate's liability cannot be lawfully excused, it and its related bodies corporate's liability shall be limited to the replacement of, or cost of the fertiliser supplied. The buyer accepts and uses this product subject to these conditions.

COPYRIGHT

Copying or reproduction in whole, or in part, by any means, or transmission, or translation into a machine language without the written permission of Incitec Pivot Limited, is strictly prohibited.