



# MAGNESIUM OXIDE

## ANALYSIS

### Nutrients

- Magnesium (Mg) w/w as oxide 55%

### Heavy metal impurities

- Cadmium (Cd) 1 mg/kg Cd (max)
- Lead (Pb) 10 mg/kg Pb (max)
- Mercury (Hg) 0.2 mg/kg Hg (max)

## USE

Incitec Pivot Magnesium Oxide is a granulated magnesium oxide fertiliser, for dry application to the soil. Magnesium Oxide is insoluble. It cannot be used in fertigation programs or in foliar sprays.

Incitec Pivot Magnesium Oxide is not suitable for use as a mineral supplement for livestock, or for the direct treatment of hypomagnesaemia (grass tetany or staggers). Products that have been ground to a fine powder or dust should be used for this purpose.

## DIRECTIONS

Being granular and insoluble, Magnesium Oxide takes time to react in the soil after application and release magnesium in forms available for plant root uptake. It needs to be applied early. Magnesium oxide should be applied pre-plant in annual crops, and in advance of the main growing season in trees, vines, and plantation crops.

Magnesium Oxide should not be used where Mg deficiency is apparent, and a quick response is required. Nor should it be used in basal planting fertilisers in crops on soils on which Mg deficiency has been known to occur. A water-soluble fertiliser, containing magnesium in the sulphate form, should be used in these circumstances.

The time at which Magnesium Oxide is applied is less critical on soils with moderate Mg levels where Mg is to be applied to maintain the soil's Mg status, rather than to obtain an immediate crop response. Magnesium Oxide reacts most quickly in acid soils, e.g. pH below 6.5. Magnesium Oxide is less effective and may be ineffective in alkaline soils.

## ANNUAL CROPS

Magnesium oxide should be broadcast applied early in the fallow period, several months before planting. It is best to wait for a few weeks to allow the granules to weather and disperse before working the magnesium oxide into the soil.

## TREE CROPS

Broadcast in advance of the main growing season. If magnesium deficiency is evident in the foliage, supplementary magnesium will need to be applied in a more readily available (water-soluble) form, e.g. through fertigation programs and/or as a foliar spray.

## APPLICATION RATES

Suggested application rates for magnesium oxide, which may remain effective for several years, are:

- Pasture, forage, grain, and oilseed crops. 50 – 200 kg/ha
- Sugarcane (for a crop cycle). 150 – 300 kg/ha
- Horticulture - vegetables, tree crops and vines. 200 – 400 kg/ha

In perennial horticultural crops, magnesium oxide may be applied more regularly in combination with nitrogen (N), phosphorus (P) and potassium (K), in fertiliser programs. A suggested annual application rate is 50 – 100 kg/ha.

Magnesium oxide is not recommended where a quick response to Mg is required, i.e. in planting fertilisers for annual crops, or during the growing season.

## FURTHER READING

An Agritopic on Magnesium is available in which the use of Mg fertilisers is discussed in more detail. It should be read in conjunction with these Use Directions.

## CARE OF EQUIPMENT

Fertilisers can be corrosive to metals. So clean equipment after use.

## 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.

Magnesium Oxide is characteristically a dusty product. 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.