



SULPHUR BENTONITE

%N	%P	%K	%S
0	0	0	90

WARNING



Causes skin irritation.

Classified as Hazardous according to Safe Work Australia criteria.

ANALYSIS

Nutrient content

- Sulphur (S) – Elemental 90%

Heavy metal impurities

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

REGULATORY INFORMATION

Sulphur Bentonite is not classified as a Class 4.1 Dangerous Good (Flammable Solid) under the criteria of the Australian Code of Transport of Dangerous Goods by Road & Rail as it has been formed into a specific shape, i.e. granules, (SP No. 242). Sulphur dust, however, which is flammable in air, can be generated from Sulphur Bentonite during handling. This must be considered in operations such as blending.

Sulphur Bentonite is classified as Hazardous Substance according to the criteria of Safe Work Australia, as too are blends containing more than 20% elemental sulphur (S). So that blends in which Sulphur Bentonite is used are not classified as Hazardous, and to minimize fire and explosive risks associated with dust generated during handling operations, the maximum concentration at which Sulphur Bentonite is used by Incitec Pivot in blends is 20%. This (20%) is the maximum concentration at which Sulphur Bentonite can be requested in a Custom Blend.

Sulphur Bentonite is not available as a blend ingredient from all blending sites.

SULPHUR BENTONITE

Sulphur Bentonite is a degradable elemental sulphur fertiliser, comprised of 90% elemental sulphur and 10% dispersing clay (bentonite).

When the granules are wetted, they absorb moisture and disperse. The elemental sulphur particles are then oxidised by *Thiobacillus* bacteria in the soil to the sulphate form, the form in which sulphur is taken up by plant roots. This biological process occurs most rapidly under warm moist soil conditions. Until this occurs, the elemental sulphur is of no use to plants. It is not immediately available for plant root uptake.

Sulphur Bentonite should be broadcast on the soil surface. It should not be drilled into the soil, or incorporated until after the granules have dispersed, as whole granules will be constrained by the soil and will not disperse properly.

Sulphur Bentonite is not recommended for use in crops, nor where a quick response to sulphur is required. If Sulphur Bentonite were to be used in annual crops, it would need to be broadcast applied before planting. It is not suitable for use in planting fertilisers or application during the growing season.

Sulphur Bentonite must not be used in crops such as canola, which is responsive to and has a high requirement for sulphur. Canola is also grown in the winter when the action of *Thiobacillus* bacteria are slowed by low temperatures. Sulphur must be applied in the sulfate form in these situations.

USE

Sulphur Bentonite is primarily intended for annual application in legume-based pasture grown on soils testing high in phosphorus, e.g. some basaltic soils in the New England.

In the past, sulphur fortified grades of Superphosphate, e.g. SF45, which are no longer available, were used in these situations. Alternatives can be formulated by blending Sulphur Bentonite with SuPerfect®. Muriate of Potash can be added to the blend if potassium is required as well.

There are few, if any, other situations where the use of Sulphur Bentonite should be considered. If both phosphorus and sulphur are required in similar amounts, it is recommended that SuPerfect be used. If nitrogen and sulphur are required, it is recommended that Gran-am be used to meet the sulphur requirement. The balance of the nitrogen may be applied in some other form, e.g. Urea.

FURTHER READING

An Agritopic on “Sulphur” is available if required and should be read in conjunction with these “Use Directions”.

FIRST AID

If on skin, wash with soap and water. If skin irritation occurs, seek medical advice. Remove contaminated clothing. Wash before reuse.

CARE OF EQUIPMENT

Fertilisers can be corrosive to metals. 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. 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.

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