



# Sulfur Bentonite

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

**WARNING**



Causes skin irritation.

Classified as Hazardous according to Safe Work Australia criteria.

## ANALYSIS

90 % Sulfur (S) - Elemental

## 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

Sulfur 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).

Sulfur dust, however, which is flammable in air, can be generated from Sulfur Bentonite during handling. This has to be considered in operations such as blending.

Sulfur Bentonite is classified as Hazardous Substance according to the criteria of Safe Work Australia, as too are blends containing more than 20% elemental sulfur (S).

So that blends in which Sulfur 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 Sulfur Bentonite is used by Incitec Pivot in blends is 20%. This (20%) is the maximum concentration at which Sulfur Bentonite can be requested in a Custom Blend.

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

## SULFUR BENTONITE

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

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

Sulfur 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.

Sulfur Bentonite is not recommended for use in crops, nor where a quick response to sulfur is required. If Sulfur 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.

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

## USE

Sulfur 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, sulfur fortified grades of Superphosphate, e.g. SF45, which are no longer available, were used in these situations. Alternatives can be formulated by blending Sulfur 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 Sulfur Bentonite should be considered. If both phosphorus and sulfur are required in similar amounts, it is

recommended that SuPerfect be used. If nitrogen and sulfur are required, it is recommended that Gran-am be used to meet the sulfur requirement. The balance of the nitrogen may be applied in some other form, e.g. Urea.

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

## **SAFETY DIRECTIONS**

Avoid ingestion and inhalation of dust.

Avoid contact with eyes or skin.

Wash hands after use.

## **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.

## **WARNING**

Before using fertiliser seek appropriate agronomic advice. Fertiliser may burn and/or damage crops or pasture. Because climatic and soil conditions, application methods, irrigation and agricultural practices are beyond the control of Incitec Pivot Limited and cannot be foreseen, Incitec Pivot Limited accepts no responsibility whatsoever for any commercial damage, loss or other result following the use of this product whether used in accordance with directions or not, subject to any overriding statutory provision and provided that such liability under those provisions shall be limited to the replacement of the goods as supplied or the rendering again of the services that are provided. The buyer accepts and uses this product subject to these conditions.

Incitec Pivot Fertilisers (a business of Incitec Pivot Ltd ABN 42 004 080 264) 28

Freshwater Place

Southbank Vic 3006

Freecall 1800 009 832

[www.incitecpivotfertilisers.com.au](http://www.incitecpivotfertilisers.com.au)