SWANCORP

NutraGold

Sulphur Bentonite Pastille

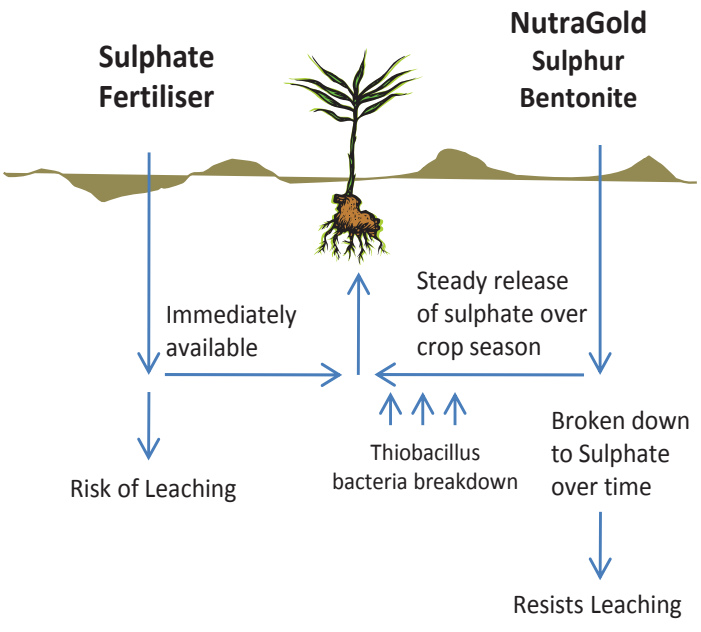
Sulphur Essentials

- Sulphur is the fourth essential element after N, P & K
- Sulphur is vital for optimum plant growth, yield and quality
- Sulphur deficiencies reduce plant protein production
- Sulphur is not soluble and microbial activity is essential
- Sulphur Particle size is crucial for making SO_4 available

Sulphur (S) plays a vital role in crop nutrition and is essential for optimal plant growth, yield and quality. The natural supply of Sulphur from the atmosphere has reduced due to cleaner air through a reduction in industrial gas emissions. Combining this with the increased trend towards using high-analysis sulphur free fertilisers has resulted in many regions soils becoming sulphur deficient. As a result demand for sulphur for an agricultural application has grown rapidly.

Although elemental sulphur is readily available in large quantities there are specifications that must be met to make it suitable for a ground application. Sulphur is not soluble. To be effective sulphur must be oxidised by soil microorganisms. There are a number of natural variables that influence oxidisation rates but the particle size of the elemental sulphur is a major factor. Research suggests that the oxidisation of elemental sulphur is higher when fine (50µm – 150µm) particles of elemental S are used compared with coarse elemental sulphur.

Comparing Sulphur Cycles



NutraGold

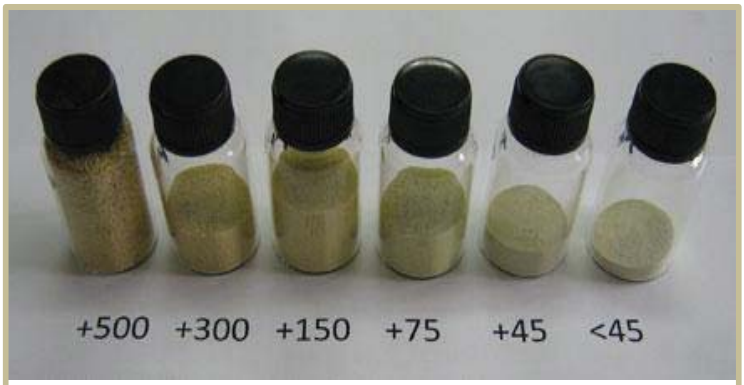
- Suitable for plant nutrient sulphur deficiencies
- Suitable for use as a soil amendment for correction of problem alkaline soils
- Consistently sized pastilles. Designed for spreading and blending
- Free flowing
- Easy to handle store and apply
- Very low dust content

NutraGold (0-0-0-90)

NutraGold is manufactured in Brisbane, Queensland and is used extensively as a fertilser for blending and direct application across the eastern states of Australia.

NutraGold is a split pea shaped granular (pastille) dispersible sulphur . The product is made from a homogenous mixture of sulphur and bentonite which allows the formulation of fine sulphur particles in the pastilles. The bentonite acts as a swelling agent that fractures the pastilles when they come into contact with soil moisture and creates tiny particles of sulphur making them available to microbial activity over the growing season. The microbes then oxidise the sulphur turning it into sulphate which is available SO_4 for crop take up.

NutraGold is suitable to use for plant nutrient sulphur deficiencies or as a soil amendment for correction of problem alkaline soils.



SWANCORP - NutraGold (Sulphur Bentonite)

Typical Particle Size breakdown (micron)

Timed Release

There are many variables that influence the conversion of S to SO_4

Regular sulphur granules take a long time to convert to SO_4 and powders are very difficult to spread

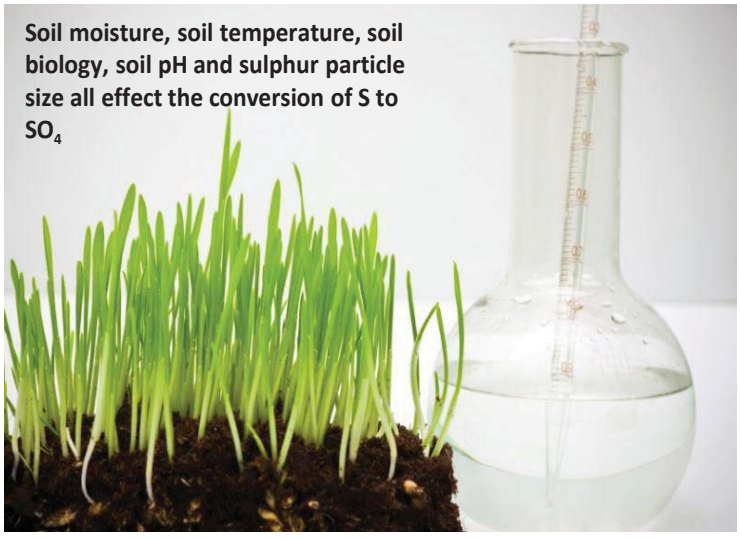
NutraGold is designed for safe blending and spreading

NutraGold contains a range of sulphur particle sizes for quick and long term conversion to SO_4

Efficiency in an immediate and longer term supply of S

There are many variables that affect the timed conversion of Sulphur S to Sulphate SO_4. These include things like soil moisture, soil temperature, soil biology, soil pH, and sulphur particle size.

Standard granules of elemental sulphur 99.9% (1mm - +5mm) take a very long time to convert to a crop useable sulphate SO_4. NutraGold (Sulphur Bentonite) offers a range of particle sizes in each pastille. The smaller particles are readily available to microbial activity for quick conversion to sulphate and the larger particles in the distribution continue to breakdown over the season and become available for conversion to SO_4. NutraGold therefore supplies a timed conversion of sulphur both quickly and over the longer term giving it a substantially greater efficiency in the supply of S over the season.



Soil moisture, soil temperature, soil biology, soil pH and sulphur particle size all effect the conversion of S to SO_4

Storage and Handling

NutraGold is classified as non hazardous and is suitable for all types of transportation

NutraGold is available in 25kg bags, 1.2t Bulk Bags or Bulk

NutraGold is available for export

Very low dust content allows for safer handling and efficient blending capabilities

For more information please refer to the Material Safety Data Sheet (MSDS) available on the Swancorp website www.swancorp.com.au

Making and handling fine sulphur particles has proven difficult from a safety perspective for sulphur manufacturers over the years. Much effort has been put into developing processes to produce a micro fine sulphur safely. NutraGold pastilles incorporate the fine sulphur particles into the pastilled granules allowing for safer handling, non hazardous transportation and efficient blending capabilities.

NutraGold is suitable for use as a soil amendment for correction of problem alkali soils

NutraGold

Australian made. Industry leading quality

90% Sulphur / 10% Bentonite pastilles that are suitable for blending and direct application

Small S particles in every pastille are converted for plant availability. Resistant to leaching until converted to sulphate

Low dust, non hazardous, high analysis Sulphur (S)

Distributed by:

SWANCORP

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