Product Data Sheet

S-Chelate Plant Nutrition
For Escalated Micronutrient Uptake

S-Chelate B

Coating Powder

Element	Quantity
Elemental Boron (B)	20% minimum

This is the level of Boron quoted as elemental not as an oxide or any other compound.

Particle Size Distribution

Measured on Malvern

Volume weighted mean – 25 microns

50% under 18 microns

Appearance White extra fine, high volume powder, low bulk density powder

Bulk Density 0.42g/cm3

Packing 10kg PE lined steel pails

Field Cereal Crop Application Guide Rates

(For use alongside NPK plant macronutrients)

For each foliar application:	
Maintenance Rate	0.2-0.3kg/ha
Moderate Deficiency	0.3-1.1kg/ha
Severe Deficiency	>1.1kg/ha

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The application rate will vary depending on the crop and application regime. For example you may prefer half the number of applications and apply up to double the guide amount for each application.

We recommend you perform soil and tissue tests to determine the optimum application rate and optimise your costs.

As with all S-Chelate products, the ingredients are food or feed grade and as long as they are used at the guide rates are completely safe to use on all crops.

This is a single, straight element product but we can offer customised multi-component formulated systems to suit your requirements. Please see below for a result achieved with our S-Chelate Cultiv-8 eight element system.

As a guide dissolve the above amounts in 200 litres of water to apply over one hectare. However, the guide application quantities are easily soluble in smaller volumes of water or can be dissolved in larger volumes as long as there is sufficient stirring to ensure it has diffused evenly throughout the mixing tank in the greater volume of water.

Application Timing

Preventive: Apply at early stage after establishment of the seedlings, at 4-6 leaves stage.

Remedial: Start at first sign of micronutrient deficiency; apply 2 additional sprays at 10-15 day intervals.

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Under-Cover, Controlled Growing Systems

S-Chelate B is ideal for use in drip fertigation polytunnel fruit growing systems where their pH range can overcome the locking up of nutrients which can be caused by growing media like coconut coir.

S-Chelate B is perfect for use in vegetable and herb hydroponic systems where the pH range tolerates other chemicals like hydrogen peroxide used to control pathogens in this intensive, high volume growing environment.

Product Features

S-Chelate B is bioavailable in a much broader-than-normal range of pH and soil conditions such as in contact with clay, carbonates, phosphates, organic matter and other elements in the soil that seek to tie up and make secondary elements and micronutrients insoluble.

Ground to a fine powder, S-Chelate Coating Powders coat and then cling to NPK granular fertilizers in such a way as to deliver a targeted nutrition straight to the plant. Nutrition is absorbed into the plant through the roots and is targeted in such a way that the elements are subsequently found in tissue samples of the plants instead of being wasted on surrounding soil. This enhanced nutritional bioavailability results in healthier plants, increased yields, and larger fruits and vegetables.

Deficiency Symptoms

Symptoms of deficiency can vary across crop species, but similarities exist for how nutrient insufficiency impacts plant tissue colour and appearance. Nutrient deficiencies are commonly associated with the physical location on the plant (i.e., whether the symptoms are primarily observed on older versus newly formed plant tissue), but these symptoms can spread as the severity of the deficiency progresses. It should be noted that Boron deficiency can also lead to calcium deficiency as Boron is normally needed to enable Calcium to be absorbed.

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Boron Deficiency in Alfalfa

All photos are provided courtesy of the International Plant Nutrition Institute (IPNI) and its IPNI Crop Nutrient Deficiency Image Collection. The photos above are a sample of a greater collection, which provides a comprehensive sampling of hundreds of classic cases of crop deficiency from research plots and farm fields located around the world. For access to the full collection, you can visit IPNI's website.

Foliar Application

S-Chelate Coating Powders have a second important function - they are highly soluble and can be dissolved for use as liquids for spray, drip, and fertigation. Compatible with most liquid fertilizers, herbicides, insecticides, and fungicides, S-Chelate Coating Powders demonstrate their tremendous bioavailability sprayed onto the leaves of crops that demonstrate a nutrient deficiency.

However as a precaution please jar test before mixing with other agrichemicals.

Guide application rates produce very dilute solutions of 0.2-2% but due to application conditions varying widely, we always recommend trialing before adopting a new program widely and cannot accept liability for damage or underperformance.

S-Chelate B

An example we are proud to show of our product performance and formulating capability

Brown Turkey figs – Crop tripled with S-Chelate Cultiv-8 which includes S-Chelate B

Please contact us or our agents for technical support.

Achieve greater yields with Super Bioavailable S-Chelate™ Technology

Chemistry not Mystery

Made in the UK

Get in touch

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