



Foliar Powder



Element	Quantity
Iron (Fe ²⁺ - Ferrous Ion)	13%

This is the level of Iron quoted as an element not as an oxide or any other compound.

Level of Chelation

Precipitation Point pH 11 minimum.

Volume of 0.5M NaOH to precipitate 1% solution – >18ml

Completely water soluble.

Particle Size Distribution

Volume Weighted Mean – 437 microns

50% under 283 microns

Appearance

Pale Green Powder

Bulk Density

1.13g/cm³

Packing

20kg 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

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.

Under-Cover, Controlled Growing Systems

S-Chelate Fe 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 Fe 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 Fe has a unique chelate chemistry that can transport this important trace element into the plant with remarkable effectiveness as the Ferrous ion which is the ion preferred by the plant.

S-Chelate Fe 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.

This wide pH tolerance is equally useful in controlled growing systems like horticultural drip fertigation polytunnel systems where media like coconut coir can tie up micronutrients like iron and copper and hydroponic systems where tolerance to chemicals like hydrogen peroxide is needed which may be used to prevent pathogens from developing in this highly intensive growing environment.

Chelation is defined as the capacity to hold the metal ion in solution above the precipitation point of the non-chelated ion and the Level of Chelation measurement is your assurance of the performance of our product which will stand up to independent verification.

This is the backbone of the performance of this technology resulting in markedly lower application rates than for non-chelated products because so much more of the metal ion will stay in solution and reach the plant tissues as has been shown convincingly by yield and quality improvements alongside parallel tissue analysis.

There are two ways this works:

1) In the growing medium

Protecting the vulnerable cationic metal ions from being tied up and allowing them to reach and be absorbed by the root hairs.

2) In the plant

Carrying them in a more biologically compatible way to the regions of the plant where they are needed. Chlorophyll is a chelate structure so the plant's phloem system recognises S-Chelates as organic molecules with familiar structures, enabling them to be transported and assimilated more readily than traditional unchelated mineral salts.

S-Chelate powders are compatible with most liquid fertilizers, herbicides, insecticides, and fungicides, however, as a precaution please perform a jar test before mixing with other agrichemicals.

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

Chlorosis - One of the problems caused by a lack of iron

Chlorosis is commonly caused by an inability to synthesise sufficient chlorophyll which can be caused by poor nutrition including a deficiency of Iron, Magnesium and Zinc.

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A Liquidambar leaf with interveinal chlorosis

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 Fe

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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