

SICOCHEL® & PROCHEL® WORLD-CLASS CHELATED MICRONUTRIENTS





PRODUCT DESCRIPTION

Sicochel chelates are designed to correct micronutrient deficiencies in many cropping situations. **Sicochel** chelates, complex organic compounds in which the nutrient element is 'held' within the molecular structure, preventing it from reacting with other substances. **Sicochel** formulations are based on EDTA, DTPA and EDDHA which provide greater stability than products based on polyflavanoids, lignosulphonates, glucoheptonates, citric acid or NTA. All **Sicochel** chelates are supplied as free flowing, low dust microgranules. They dissolve completely and rapidly in water.

SUPERIOR QUALITY OVER TRADITIONAL MICRONUTRIENT SOURCES = WORLD-CLASS!

- Lower quantities are required because almost all of the chelated nutrient is available to plants.
- Compatible with a wide range of crop care chemicals enabling economical tank mixing.
- Lower risk of leaf scorch or root damage because Sicochel chelates are not caustic.
- Quick and reliable crop response because **Sicochel** chelates are readily absorbed.
- Manufactured to international quality assurance standards (BS EN ISO 9001).

ADVANTAGES

Sicochel chelates offer many advantages over traditional micronutrient sources because of their protective chemical structure that prevents reaction with other substances. Even in soils with high pH levels, Sicochel chelates are unaffected by reactions with soluble phosphates naturally present or applied in NPK fertilisers. Traditional micronutrient sources, such as sulphates or oxides react with phosphates rendering them unavailable for plant uptake.

APPLICATIONS

Sicochel chelated micronutrients are recommended for soil and foliar application in many cropping situations including: • Arable crops • Horticulture • Orchards • Ornamentals • Hydroponics systems • Fertiliser enrichment

APPLICATION RATES

Complete directions for use are provided on each **Sicochel** product label. However the table below gives general application rates for guidance when ordering.

PACKING

Sicochel chelates are supplied in beautiful 1 kg boxes and 20/25 kg cartons and in big bags.

INSTRUCTIONS FOR USE

Foliar application: simply add the appropriate amount of **Sicochel** chelate to the main bulk of the spray tank water (no need to pre-mix) and agitate. Should other products need to be added - do this last - that is, after the chelate has dissolved. In general, spray conditions should not exceed a 0.1% solution. Applications may need to be repeated as required. A non-ionic wetting agent (such as 'Chelsorb') should be added at the recommended rate where **Sicochel** chelates are applied alone.

<u>Soil application</u>: **Sicochel** chelates can either be dissolved in a convenient volume of water and applied as a coarse spray or applied directly to the soil. If the latter, the chelate must be watered or incorporated into the soil soon after application.

Other uses : for information on the use of Sicochel chelates in hydroponics, fertiliser enrichment, soil injection, fertigation etc ..., please consult us.



Product	Description & Principle Uses	Soil applications (kg/ha)		Foliar applications (kg/ha)	
		Slight deficiency	Severe deficiency	Slight deficiency	Severe deficiency
SICOCHEL Fe 7% EDDHA ECONOMY	EDDHA chelate, containing 7% iron, as Fe. For use on all soils, but is especially effective on soil with pH > 7.5	1.00 - 3.00	3.00 - 5.00	Not applicable	Not applicable
SICOCHEL Fe 6% EDDHA-HP	High Performance EDDHA chelate containing 6% iron, as Fe. Contains a min. of 4% ortho-ortho Fe EDDHA (=> 50% o-o EDDHA) For use on all soils, esp. calcareous & alkaline soils	1.00 - 3.00	3.00 - 5.00	Not applicable	Not applicable
SICOCHEL MAGIC Fe 6 % EDDHA	Top performance EDDHA chelate containing 6% iron as Fe. Contains a min. of 4.8% ortho-ortho Fe EDDDHA (=> 80% o-o EDDHA) For use on all soils esp. calcareous & alkaline soils	0.90 - 3.00	2.70 - 5.00	Not applicable	Not applicable
SICOCHEL Fe-DTPA	DTPA chelate, containing 7% iron, as Fe. For moderately alkaline soils of up to pH 7.5 and hydroponics	1.00 - 3.00	3.00 - 5.00	Not applicable	Not applicable
SICOCHEL Fe-EDTA	EDTA chelate, containing 13.2% iron, as Fe. For soils and hydroponics solutions below pH 6.5 and for foliar spraying	1.50 - 3.00	3.00 - 6.00	0.50 - 1.00	1.00 - 2.00
SICOCHEL Ca*	EDTA chelate, containing 9.5% calcium, as Ca. For foliar spraying and for adding to soils without increasing pH	Not applicable	Not applicable	0.50 - 1.00	1.00 - 2.00
SICOCHEL Co+	EDTA chelate, containing 14% cobalt, as Co For foliar spraying and all soils	0.50 - 1.00	1.00 - 2.00	0.25 - 0.50	0.50 - 1.00
SICOCHEL Cu+	EDTA chelate, containing 14% copper, as Cu For foliar spraying and all soils	0.50 - 1.00	1.00 - 2.00	0.25 - 0.50	0.50 - 1.00
SICOCHEL Mg	EDTA chelate, containing 5.5% magnesium, as Mg For foliar spraying	Not applicable	Not applicable	0.50 - 1.00	1.00 - 2.00
SICOCHEL Mn+	EDTA chelate, containing 13% manganese, as Mn For foliar spraying	Not applicable	Not applicable	0.50 - 1.00	1.00 - 2.00
SICOCHEL Mn-DTPA	DTPA chelate, containing 6% manganese, as Mn For use on all soils	3.00 - 5.00	5.00 - 8.00	Not applicable	Not applicable
SICOCHEL Zn+	EDTA chelate, containing 14% zinc, as Zn For foliar spraying and all soils.	0.50 - 1.00	1.00 - 2.00	0.25 - 0.50	0.50 - 1.00
SICOCHEL MIX+	Chelate mixture, containing 1.70% Cu; 3.35% Fe; 0.70% Mn; 0.60% Zn; 0.875% B; 0.023% Mo** For foliar spraying.	Not applicable	Not applicable	1.00 - 2.00	2.00 - 3.00

^{**} Do no apply **SICOCHEL** Ca to fruit crops as a foliar spray ** Boron and molybdenum present as inorganics *** EEC Fertiliser **** **SICOCHEL** Fe 7 % EDDHA ECONOMY is a carefully designed iron fertiliser for use by cost-conscious growers cultivating their precious crops in moderately high pH, calcareous soils. Containing FeEDDHA, the product has been marketed extensively for over 25 trouble free years and used by tens of thousands of <u>satisfied customers</u>. Much talked about but poorly understood isomeric ratios have no relevance for **SICOCHEL** Fe 7 % EDDHA ECONOMY. They do not form part of the product specification nor are they published. <u>Rather the product's flawless reputation is the product's quality benchmark</u>. Where soil conditions are too harsh even for **SICOCHEL** Fe 7 % EDDHA ECONOMY, two yet more effective sister products are available: **SICOCHEL** Fe 6 % EDDHA-HP, high performance FEEDDHA for general use and **SICOCHEL** MAGIC Fe 6 % EDDHA where absolute confidence in efficacy is demanded and expected by the discerning grower.

SICOCHEL MICROSTAR II

A balanced source of essential micronutrients for the treatment of deficiencies in all crops

1. PRODUCT DESCRIPTION

SICOCHEL MICROSTAR II is a fully water soluble product containing 4.3% Nitrogen, 5% Magnesium (as MgO), 5% Iron, 4% Manganese, 0.5% Copper, 5% Zinc, 1.5% Boron. Chelating agents: EDTA and 2 hydroxy 1,2,3 propane tricarboxylic acid (CAC)

2. DIRECTIONS FOR USE

SICOCHEL MICROSTAR II can be both foliar or soil applied. Dissolve the required amount in a convenient volume of water and apply to soil or foliage. Application by trickle irrigation equipment is both economical and very effective.

3. SUGGESTED RATES OF USE

- Wheat, barley, maize, alfalfa:	Three applications of 2 –2.5 kg per ha at 10-15 day intervals. Central pivot irrigation apply in doses of 1.5 kg-2.5 kg per ha at 10-15 day intervals.		
- Other field crops:	2 or 3 applications of 250 g - 500 g per 1000 m2. (peas, potatoes, melons, tomatoes, peanuts etc.)		
- Covered crops:	Apply 300 g-500 g per 1000 m2 to the soil before planting, and then apply 150 g-200 g per 1000 m2 from flowering at 15 day intervals as a foliar spray or via trickle irrigation at 1-4 g per m2.		
- Vines, kiwi:	25-50 g per plant.		
- Citrus:	- Young trees: 200 g per 1000 m2 every other month - Mature trees: 250g-500g per tree in 2 doses, apply post harvest and pre-flowering in the early Spring.		
- Top fruit:	50 g-150 g per tree depending on the age and size.		
- Bushes, shrubs etc.:	25 g-100 g per plant depending on size.		
- Ornamentals: Azaleas, hydrangeas, etc.	100-250 g per 1000 m2 every 2 to 3 weeks		
- Grass, turf:	500g per 1000 m2 every 3-4 weeks.		

4. COMPATIBILITY

SICOCHEL MICROSTAR II is compatible with most agricultural products, however some P fertilizers should be treated with caution. We would recommend the use of the jar test if uncertainty is felt before large scale mixing takes place. The presence of N (e.g. dissolved urea 0.01-0.5% of the solution.) increases the efficacy of the treatment. Always add as the last ingredient to the spray solution. Keep out of reach of children.

SICOCHEL DELAY

Chelated Micronutrients Mix and Plant Growth Regulator (PGR) water soluble powder for foliar and soil application

1. DESCRIPTION

SICOCHEL-DELAY contains the essential micro-nutrients boron (B), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo) and zinc (Zn) as well as coadjuvants for setting and fruiting. SICOCHEL-DELAY is fully water soluble and it can be applied via foliage and soil. This product is 100% chelated: Chelating agents Na4 EDTA and Citric Acid.

2. GUARANTEED ANALYSIS

Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Contains also: Naphthyl Acetic Acid (NAA)	5 g/kg 5 g/kg 100 g/kg 40 g/kg 5 g/kg 10 g/kg 0.18 %	0.5 % 10.0 % 4.0 % 0.5 % 1.0 %
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3. SUGGESTED APPLICATIONS AND RATES OF USE

* HORTICULTURE:	aubergines, melons, watermelons, tomatoes, marrows, etc. Apply every 15-20 days to achieve good setting and fruiting. Rate: max. 4-5 kg per hectare via fertigation: max. 1-1.5 g/ltr for foliar application.
* FRUIT:	to aid setting of peaches, apples, pears, stone and pip fruits in general. Apply every 10-15 days before start of flowering. Rate: 4-5 kg per hectare repeated every 10-15 days until petal fall.
* WHEN TO SPRAY:	to get the best results from your feeding programme, do not apply the product during the hottest part of the day. Apply foliar feeds early in the morning or late afternoon.

4. COMPATIBILITY

SICOCHEL-DELAY is generally compatible with the majority of chemical crop protection products. It can be incorporated into existing spray programmes. Add the micronutrients to the water before adding any other ingredients. It is always advisable to carry out a small scale compatibility trial before mixing a full batch.





New professional superior & highly profitable range, 100% water soluble

"PROCHEL EDTA" CHELATED MICRONUTRIENTS

100% soluble powders, (pH range 5-7.5) EDTA chelated range + citric acid chelate also included, as works synergistically with the EDTA. Superior quality range as they have been formulated also with magnesium and nitrogen in addition to their being over 80% EDTA chelated and having more citric acid (CAC) to 100%! Field results show superior results to straight EDTA's! Our "PROCHEL EDTA" products are highly chelated and readily soluble and are members of our new PROCHEL- range that they contain both EDTA (100% equivalent on mole:mole basis) and citric acid (this is used to top up the formulation) In other words they are as good as the best known brands, and probably, better effectively in the field. The Prochel Cal product we would actually go further and say that it is the "bee's knees" and that there is nothing out there that is better.

"Prochel EDTA" Chelates are constructed from feedgrade metal salts with tetrasodium EDTA on a mole/mole basis, in other words they are fully chelated. There is usually a space between this measure and 100% full product – In the 'free space' we fill with a fine grade citric acid. Once the products are dissolved in water the pH of our product would be a little lower and the plant will feel more comfortable with a product that is partially constructed from a chemical (citric acid) that is part of its own chemical make up (the plant recognises / takes up the citric acid and breaks it down) as Citric acid is involved in the Krebbs cycle, sometimes called the TCA cycle. Anyhow the products are fully chelated with EDTA and also in association with citric acid. The citric acid need not be mentioned on the label as most people anyway donot understand this chemistry.

Risk of phytotoxicity is actually reduced by adding citric acid! The EDTA molecule eventually disassociates from the metal and goes off into the environment – the environmental fate of the EDTA molecule is long lasting. In association with citric acid the pH is reduced a bit more and the product is more effective. This means Prochel is more plant friendly, gives better results and on top it's cheaper! What you want more?

Product range

Prochel Zin 14 % Zn EDTA

Prochel Man 13 % Mn EDTA

Prochel Cal 10 % Ca EDTA

Prochel Mag 6 % Mg EDTA

Prochel Cop 14 % Cu EDTA

Prochel Fer 13.2 % Fe EDTA

Prochel Complex SP (4 % Fe, 4 % Zn, 3 % Mn, 2.5 % MgO, 0.5 % Cu, 0.05 % Mo)





Authorised distributor :