

Gripper C Trace

Gripper C Trace is a high analysis, highly soluble, multiple chelated trace element product, which eliminates trace element deficiencies and restores the critical micronutrient balance in a range of horticultural and viticultural crops. Gripper C Trace is manufactured with a highly versatile and stable chelating agent called Ethylene diamine tetra acetic acid, often abbreviated to EDTA.

Nutrient	Analysis W/v %	Nutrient	Analysis W/v %
Zinc (Zn)	3.0	Molybdenum (Mo))	0.4
Manganese (Mn)	2.0	Copper (Cu)	0.3
Iron (Fe)	1.3	Sulphur (Su)	2.8
Boron (B)	0.7		
Product Details			
Specific Gravity	1.20 +- 0.010	Colour	Greenish Blue
pH	2.8-3.8	Pack Sizes (Lt)	20, 200,1000, Bulk

EDTA CHELATES - SPRAYGRO GRIPPER RANGE

Chelated micronutrients are widely used in agriculture. There different types of chelating agents used depending upon the objective and method of application. Gripper C Trace has been synthesised using ethylene diamine tetra acetate (EDTA), which makes it an ideal fertigation product that can also be used as a general foliar product. Many products used as foliar sprays have weaker chelation, which makes them a poor option for fertigation.

The EDTA chelating agent keeps the trace element in solution under varying degrees of soil pH fluctuation. Plants are able to absorb EDTA chelates very easily through their roots and translocate it to the shoot as an intact molecule. Once into the leaves the EDTA is metabolized and metallic trace element is released for plant use.

As a result, Gripper C Trace is ideal for trace element application through the soil, especially the acidic and moderately alkaline calcareous soils, where the trace elements are readily available to the plant roots. Gripper C Trace was developed as a result of the intense negative interactions, which can occur between nutrients, as it is well balanced to provide optimum levels of trace elements. Application of single trace element can cause deficiency of other trace elements either by dilution effect or by inhibiting the uptake of others, this does not occur with Gripper C Trace.

ADVANTAGES OF GRIPPER C TRACE

- Is physically compatible with a number of liquid fertilizers such as MaxiPhos Injecta 23, Pick 15:42, 42 N, NBH 404, Result Plus and other NPK Custom Bulk Liquids (CBL's).
- Is superior to the sulphates, lignosulfonate chelated or oxide formulations of the same micronutrients due to superior availability, better uptake, translocation and utilization of nutrients in this form.
- Resist's leaf injury often caused by spray application of sulphates. The particle size of EDTA chelates is smaller than the cuticular pore size, especially around the stomatal guard cells, resulting in optimum penetration of the micronutrients.
- Is far superior to Lignosulfonate complex in soils because Gripper C Trace resists the dislodging of the metal ions in high phosphorous and calcium environments, which prevents the formation of insoluble precipitates. In the case of phosphorous, both the phosphorous and trace element are fully available for uptake.
- Plant roots can efficiently absorb the EDTA chelate molecule and translocate it to the shoots, where the EDTA is metabolized and the micronutrient can be released to exert its physiological effect.

ADVANTAGES OF GRIPPER C TRACE continued

- Gripper C-Trace has been scientifically formulated to provide a balanced diet to plants, keeping in mind the intense negative interactions among the key trace elements such as zinc, manganese and iron
- Micronutrients play a major role in effective utilization of macronutrients and help plants to resist environmental stresses.
- Gripper C-Trace contains relatively high levels of non-chelated Boron and Molybdenum to assist sugar translocation into the fruit and maximize nitrogen utilization efficiency for conversion into protein and structural carbohydrates.
- Crops fertilized with excessive nitrogen must be sprayed with Gripper C-Trace to minimize the excessive vegetative vigour and maximize food translocation into the fruiting branches and into fruit.
- Deciduous crops such as grapevines, almonds, walnuts, pistachios, peach etc should also be sprayed with Gripper C-Trace immediately after harvest to restore trace elements level for optimum photosynthesis by remaining leaves to accumulate structural carbohydrates to over-winter. These plants will show quite uniform bud burst in the next season. Citrus should also be sprayed with Gripper C-Trace after harvesting the fruit for the same reason.
- Under certain soil and climatic conditions crops sometimes show multiple trace element deficiencies often called a "syndrome". An application of Gripper C-Trace completely eliminates such syndrome due to uncompetitive penetration of all trace elements in the product.

Gripper C Trace Application Table: Minimum water rate is 1:50 for foliar application, and 1:100 for fertigation. Check label for specific crop rates & application procedures. Application rates should be based on the minimum amount of the most limiting trace element required.

Crop Type	Application Rate L/Ha		Crop Type	Application Rate L/Ha	
	Foliar	Fertigate		Foliar	Fertigate
Almonds	2-4	8-10	Melons	3-5	7-10
Apples	5-7	10-15	Nut Crops	3-4	10-15
Asparagus	2-4	7-10	Olives	3-6	9-15
Avocados	2-5	10-15	Pistachios	2-5	10-15
Bananas	2-3	8-10	Poppies	3-5	7-10
Broccoli	2-4	7-10	Potatoes	3-5	9-12
Capsicum	2-4	5-10	Stone Fruit	N/A	10-15
Celery	2-3	7-10	Strawberries	2-4	6-10
Citrus	4-5	10-15	Sugarcane	4-5	4-5
Cotton	3-7	10-15	Tomatoes	4-6	10-15
Cucumbers	2-5	8-12	Turf	3.0	6.0
Grape Vines	3-5	10-12	Tropical Fruit	2-4	7-10
Lettuce	2-3	8-10	Vegetables	2-5	7-10

OTHER PRODUCTS IN THE SPRAYGRO GRIPPER EDTA PRODUCT RANGE

GRIPPER EDTA Chelated Trace Elements	Nutrient Analysis w/v %										
	N	Su	Ca	Mg	Zn	Mn	Cu	Fe	B	Mo	Co
Gripper BZM	2.0				2.5				5.0	0.23	
Gripper C Trace		3.4			3.0	2.0	0.3	1.3	0.7	0.4	
Gripper C Trace Mag		4.4		1.0	3.0	2.0	0.3	1.3	0.7	0.4	
Gripper Calcium	1.5		4.0								
Gripper Copper							6.0				
Gripper Iron								7.5			
Gripper Magnesium	6.2			5.0							
Gripper Manganese		3.0				6.0					
Gripper Trace 5	1.0	6.0		2.0	5.0	3.0	1.0	1.0			
Gripper Trace 6		3.5			6.0	4.0	1.0		0.2		0.02
Gripper Trace 9	0.6	3.8		0.5	3.0	5.0	1.0	0.05	0.2	0.02	0.04
Gripper Zinc					7.5						

