

Micronutrient Sensitivity

	Zn	Fe	Mn	Cu	B	Mo
Alfalfa	L	M	M	H	H	M
Apples	H	M	H	M	H	L
Asparagus	L	M	L	L	L	L
Barley	M	H	M	H	L	L
Beans	H	H	H	L	L	L
Blueberries	M	H	L	M	L	L
Broccoli	M	H	M	M	M	M
Cabbage	M	M	M	M	M	M
Carrots	L	M	M	H	M	L
Cauliflower	M	H	M	M	H	H
Celery	M	M	M	M	H	L
Clover	M	M	M	M	M	H
Corn	H	M	L	M	L	L
Cotton	H	L	H	M	M	L
Cucumber	M	M	H	M	L	L
Grapefruit	H	H	H	H	L	M
Grapes	L	H	H	M	M	L
Lettuce	M	M	H	H	M	L
Oats	L	M	H	H	L	H
Oranges	H	H	H	H	L	M
Peaches	H	H	H	M	M	L
Pears	M	M	M	M	M	L
Peas	L	M	H	L	L	M
Peppermint	L	L	M	L	L	L
Potato	H	M	M	M	L	L
Radish	L	M	H	M	M	M
Raspberries	M	H	H	M	M	L
Rice	M	H	M	L	L	L
Roses	H	H	H	M	H	L
Rye	L	M	L	H	L	L
Sorghum	H	H	H	M	L	L
Soybean	M	H	H	M	L	M
Spearmint	L	L	M	H	L	L
Spinach	L	H	H	L	M	H
Strawberries	M	H	H	M	M	L
Sudangrass	H	H	H	H	L	L
Sugar Beet	M	H	H	M	H	M
Sweet Corn	H	M	M	M	L	L
Table Beet	M	H	H	H	H	M
Tomato	M	H	M	M	M	M
Turnip	M	M	M	M	H	M
Wheat	M	L	H	H	L	L



"The Finest Name in Plant Nutrition"

RSA PLATINUM Chelate POWDERS



RSA MICROTECH, LLC
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MARYSVILLE, WA 98270

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RSA MicroTech, LLC

TO:



Platinum Powders

EDTA (ethylenediamine tetracetic acid), DTPA, and EDDHA [ethylenediamine-N',N'-bis(2-hydroxyphenyl acetic acid)] are very strong chelating agent used in chelating metallic micronutrients and alkaline-earth secondary nutrient elements.

EDTA is used as a chelating agent for copper, iron, manganese, zinc, calcium, and magnesium.

Platinum Chelate powders are higher in analysis than their corresponding liquids and are easy to ship, easy to put into solution, and have a very long shelf life.

RSA Platinum Chelate Powders are manufactured according to stringent standards and are some of the purest formulations on the market. This purity is the reason RSA's Platinum Chelate Powders are higher in analysis than many other powdered chelates on the market.

Most agricultural soils have certain properties that tend to reduce or limit the availability of micronutrients. In alkaline soils, carbonates, bicarbonates, and even hydroxides tend to convert soluble micronutrients into insoluble products. In acid soils, high levels of phosphates are the primary factor that limits availability. This de-activation occurs rather rapidly when inorganic nutrients are applied to the soil.

EDTA, DTPA and EDDHA chelates protect the nutrient element from being converted to this insoluble form at a rapid rate keeping needed Micronutrients available to the plant over the entire growing season. Mineral acids' extreme acidity can breakdown the EDTA, DTPA and EDDHA chelated micronutrients.

Platinum Powders

These chelate powders are also used extensively in drip irrigation systems. They will remain in solution in high pH, high calcium, high magnesium and/or high carbonate water and not foul the drip system either in the lines or the filters.

The type of chelating agent used mainly depends on the application, the crop, and the pH of the soil and or growing media. Because of the sensitivity to pH of iron, RSA has the broadest product range for Fe. For all other metals EDTA is used.

Fe EDDHA 6% is stable over a wide pH range (3.5-9) and best suited for use in high alkaline soils. The iron in the ortho-ortho isomer is 4% and the remaining iron is strongly chelated with other isomers such as ortho-para.

Fe DTPA 11% is stable over a wide pH range (3-7) and best suited for use in hydroponic applications and where the soil is less than 7.0.

Fe EDTA 13% is stable over a wide pH range (3-6.5) and best suited for use in soil application where the soil is less than 6.5.

For foliar applications EDTA is used as chelating for all trace elements including iron but in hard water areas, Fe DTPA is a better choice. In soil applications EDDHA is the preferred chelating agent for iron in alkaline soils, For the other trace elements EDTA is the most common chelating agent.

Platinum Powders

Platinum 15% EDTA Copper

Platinum 13% EDTA Iron

Platinum 13% EDTA Manganese

Platinum 15% EDTA Zinc

Platinum 9.5% EDTA Calcium

Platinum 6% EDTA Magnesium

Platinum 6% EDDHA Iron

Platinum 11% DTPA Iron

Platinum Micro Mix 1
5% N, 0.7% B, 0.3% Cu,
8.1% Fe, 3.5% Mn, 0.3% Mo, 0.6% Zn

Platinum Micro Mix 5
3% N, 3% Ca, 2% Mg, 0.5% B,
1% Fe, 1% Mn, 0.07% Mo, 2.3% Zn

All of these products are available in the following configurations:

1 x 10 pound bag in a box (w/ handle)
96 boxes per pallet

The following chart lists the sensitivity of several crops to micronutrient deficiencies. This may serve as a general guide in determining the potential for a micronutrient deficiency.