



MENAFERT

Product leaflet

**Trace Elements
EDDHA-CHELATES
IRONPRO 3.0**

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EDDHA CHELATES – IRONPRO 3.0

EDDHA, short for ethylenediamine-N,N'-bis(2-hydroxyphenylacetic acid), is a chelate which protects nutrients against precipitation in the highest pH-range (pH 4-9). This makes the EDDHA-chelates suitable for alkaline and calcareous soils as well as soils containing high levels of carbonate.

It is mainly used for fertigation in open fields and soil injection.

When diluted it is suitable for all irrigation systems: drip, micro and any localized injection system. MENAFERT IRON-PRO 3.0 can be used at any stage of the vegetative cycle. However for preventive treatment against chlorosis, it is recommended to apply at an early stage of the cycle.

It is also used in glasshouse hydroponic systems, although the pH never comes close to pH 9. EDDHA boosts iron availability, which is particularly interesting when root activity is low due to, for example, a low root temperature in early spring when there is bright sunshine on the leaves, a relatively high iron demand and limited root activity due low water temperature.

The MENAFERT EDDHA chelates are available in different percentages of the ortho-ortho isomer. We have a complete line of EDDHA-chelates:

- MENAFERT IRON-PRO with 4.8% ortho-ortho
- MENAFERT IRON-PRO with 4.0% ortho-ortho
- MENAFERT IRON-PRO with 3.5% ortho-ortho
- MENAFERT IRON-PRO with 3.0% ortho-ortho
- MENAFERT IRON-PRO with 2.0% ortho-ortho

Product characteristics

- Protection of the micro-nutrient against precipitation in a high pH-range (pH 4 - 9)
- Percentage of the ortho-ortho isomere: 3.0% o – o
- Easy and rapid solubility in water
- Suitable for fertigation in open field as well as for soil injection. Also suitable for fertigation in high tech, soil-less cultures
- Compatible with most water-soluble fertilizers

Dosing instructions | Fertigation

g / 1.000 l water	Iron (Fe) content	
	g / 1.000 l water ppm	mmol / l
100	6	0.11
500	30	0.54
1000	60	1.07
1500	90	1.60

Dosing instruction | Soil application: fertigation or soil injection

Crop	Dosage in kg/ha	Dosage in g/tree	Application stage
Citrus Young trees Adult trees		10 - 50 g 50 - 120 g	2- 3 applications: - 1x: vegetative development - 1x: spring application - 1x: autumn application
Fruit trees Young trees Adult trees		20- 35 g 40- 100 g	2 applications At the very beginning of vegetative development
Vineyards Young grapes Adult grapes Table grapes		5- 10 g 10-20 g 20-40 g	Before bud opening or at first symptoms of deficiency
Vegetables	15- 25 kg / ha		2 applications - 1x: 4-6 weeks after planting - 1x: Before flower induction
Flowers	20 - 70 kg / ha		2 applications - 1x: In spring period - 1x: At first symptoms of deficiency

The pH in the tank should be above 3

The mentioned indicated dosages and application stages are subject to soil and climatic conditions, influence of previous crops and other specific conditions. Exact dosages and application stages can only be given after an objective diagnostic procedure by e.g. soil, substrate and / or plant analyses.