

DESCRIPTION:

HUMIRON®, water soluble iron humate is an iron micronutrient containing 40% bio-active humic acids and 6% iron in chelated form available for plants and can be used for correction and elimination of iron deficiency. It can be applied either as a soil application or as a foliar spray. Soil applications of **HUMIRON®**, can be made as a drench, injected directly into the soil or banded. The presence of humic acids provides the positive impacts on plant growth and health as well as on resistance against stress factors.

ORIGIN:

After perennial research activities Humintech GmbH succeeded in developing a 100% water soluble, environmentally friendly iron humate.

HUMIRON®, water soluble iron humate is gained through alkaline extraction from German highly oxidized lignites (known as Leonardite) and addition of a mineral iron salt.. Next to iron it provides a very high content of humic and fulvic acids and about 60 natural biologically active trace elements. The materials of **HUMIRON®**, are harmless substances and guarantee an ecological first-quality product.

COMPOSITION:

Humic Acids:	41%
Chelated Iron:	>6%
pH-value (in 20% solution):	8 -9
Stability pH range:	6-11
Solubility in water:	100%
Saturated solution:	~ 100 g/L
Color:	dark brown
Recommended concentration:	> 3 g/L
App. 60 physiologically active trace elements for plants	



Iron Humate Granule WSG-6

HUMIRON®

WATER SOLUBLE IRON HUMATE 6% chelated iron for soil and foliar application

BENEFITS:

Iron plays a key role in formation of chlorophyll, a vital component to ensure plant health. In case of iron deficiency leaves have interveinal chlorosis where plant leaves are light green to yellow. In **HUMIRON®**, water soluble iron humate iron is strongly chelated with humic acids that makes iron available for plants in a wide variety of problem soils. It can be used for correction and elimination of iron deficiency and applied to all agricultural and horticultural plants. It can enhance the performance of fertilizers and reduces input-costs.

- Increases iron and nutrient uptake
- Economic source of iron versus traditional chelated sources
- Direct uptake of bivalent iron, prior conversion needless
- Rich in humic and fulvic acids
- Very effective in alkaline soils
- Physically fixed in soils, improves water-holding capacity and reduces leaching
- Environmentally oriented
- Increases the permeability of cell-membranes in the roots and increases nutrient uptake
- Acts as a natural chelator for micro-elements in alkaline soils and increases their availability for plants
- Decreases stress by drought and stress by the application of plant treatments
- Reduces the residues of herbicides and toxic substances in the soils
- Natural product, significant less phytotoxic than synthetic chelates

HUMIRON®, water soluble iron humate is 100% water soluble and it will not block the nozzles of irrigation systems, as the particle size of the suspension is <100 microns. It is suitable for direct application or you also can mix it with soluble fertilizer formulations like soluble NPK, DAP or urea and also with herbicides. It can be applied by sprinkler, drip or surface irrigation systems. First mix a small

amount in a minimum of 5 L of water and fill these in the mixing-tank. We recommend to carry out a miscibility test before the first application of a mixture.

Soil application:

Apply 30-100 g/tree in light sandy soils and 100-300 g in heavy soils annually in spring, either prior to or at the time of new spring growth or when deficiency symptoms appear.

Pipfruit: 10 g/tree per 10 cm diameter of bole. Citrus: 5-10 g/m² (nursery stock), 150-250 g in sandy soils and 250-500 g in heavy soils, 100-150 g/tree for an annual maintenance program.

Berries and grapes: 75-150 g per 10 m.

Field and vegetable crops, turfs: 5 kg/ha (e.g.: forage grasses, cotton, peas, rice, corn, beans, onions, potatoes, tomatoes, cabbage, cauliflower). Flax: 10 kg/ha.

Cut flowers: 10-20 g/100L in summer, 5-10 g/100L in winter.

Ornamental plants: 25-50 g/m³ (flowerpot) 5-10g/m³ (flowerbed).

Ornamental grove: 60-70 g/tree (spreaded) or per 10L water.

Roses: 10-15 g/m³ (spreaded) or 25-50 g add to 10L of water.

Foliar application:

Dissolve 3-5 g in water and apply after planting or when deficiency symptoms appear. Repeat in 2-3 weeks if needed.

Pipfruit: 20-50 g/10L per tree.

Citrus: 10 g/10L per tree.

Grapes: 10-20 g/10 L per vine.

Field and vegetable crops: 1,5 kg per hectare.

UV stability:

Absolutely UV stable at foliar application.

Form of delivery

10 kg carton box

Other forms of delivery are available on request



For further information, please contact:
HUMINTECH GmbH, Heerdter Landstrasse 189/D
D-40549 Düsseldorf - GERMANY
Telefon: +49 (0)211 - 50 66 57 - 0
Telefax: +49 (0)211 - 50 66 57 - 22
Internet: www.humintech.com • info@humintech.com