Technical Information

Librel® Fe-HI

A micronutrient fertiliser used to correct iron deficiency in crops and ornamentals growing in moderately alkaline and calcareous soils.

January 2020 | Supersedes issue dated August 2017 | Last change WF-No. 22578

BASF
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Product nformation

Product type

Micronutrient fertiliser.

Description

A soluble powder formulation of ferric ethylenediamine bis-(2-hydroxyphenyl acetate) (FeEDDHA).

PRD-No.

30483364

* BASF's commercial product numbers.

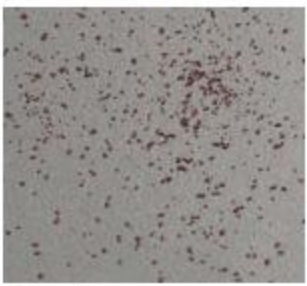
Intended use

For the treatment of iron deficiency in crops and ornamentals growing in moderately alkaline and calcareous soils.

Appearance

Librel® Fe-HI is a dark red/black spray agglomerated microgranule.

Original Size



Enlarged Image

Handling and storage

Handling

a) Librel® Fe-HI should be stored indoors in a dry place.
b) Care must be taken to exclude moisture. Drums/bags/boxes must be tightly resealed each time they are opened.
c) Big bags are not to be stacked during storage in order to prevent lumping/ agglomeration due to weight compression .
d) Please refer to the latest Safety Data Sheet for detailed information on product safety.

Materials

Containers made of the following materials are appropriate for the storage of Librel® Fe-HI:
a) HDPE – high density polyethylene
b) LDPE – low density polyethylene
c) PP – Polypropylene

Shelf life

Librel® Fe-HI has a shelf life of at least four years in its original packaging, provided it is stored correctly and drums/bags are kept tightly sealed.

Transport precautions

No special precautions are necessary for transport by air, sea, rail or road.

Harmonised tariff no.

3105 9099 90

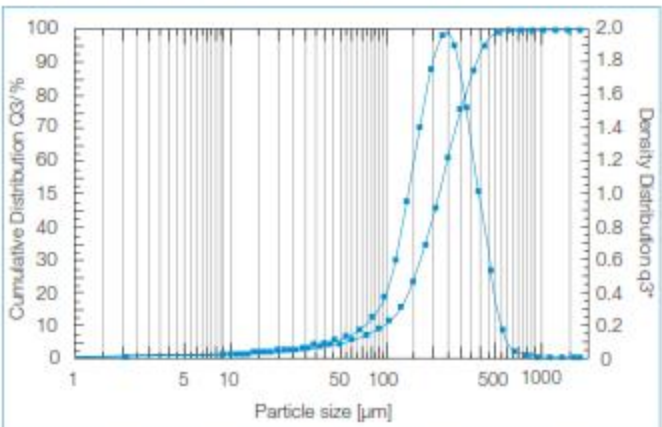
Properties

Some physical properties are listed in the table below. These are typical values only and not all of them are monitored on a regular basis. They are correct at the time of publication and do not necessarily form part of the product specification. A detailed product specification is available on request or via BASF's WorldAccount: https://worldaccount.basf.com (registered access).

Librel® Fe-HI	Unit	Value
Physical form (20 °C)		microgranule
Iron (as water soluble Fe) (BASF method, ICP-OES)	% w/w	approx. 7.0
Dry weight (BASF method, 110 °C)	%	approx. 95
Bulk density (BASF method)	g/L	approx. 630
Solubility BASF method, in water 20 °C)	g/L	approx. 30
pH value (BASF method, 1% in water)		approx. 8

Particle size distribution

The following graph shows the particle size distribution curve for Librel® Fe-HI using Sympatec Helos H1594 Gradis System with an R7 lens:



X 10 µm	X 50 µm	VMD µm	X 90 µm	X 100 µm	Peak µm
100	222	234	386	730	230

Directions for use

General information

Librel® Fe-HI gives best results when crops have adequate supplies of water and major nutrients and are not under stress for any other reason. Conditions which are responsible for one particular deficiency can also induce deficiencies of other micronutrients. Always ensure that deficiencies are confirmed before treatment is carried out.

Mixing with water

The powder should be added slowly to the main bulk of the water while it is being agitated. Continue agitation for a short while to ensure complete dissolution.

Compatibility

Librel® Fe-HI is compatible with all Librel® chelates and solutions containing soluble phosphates.

Soil application

General information

The best way to add Librel® Fe-HI to the soil is to dissolve it in a convenient amount of water (e.g. 10 grams per litre) then apply as a coarse low pressure spray. If the soil is densely compacted, the surface should be broken up before application.

Applications should always be incorporated into the top few centimetres of soil as soon as possible after application. This can be done by harrowing or hoeing in, or by irrigation.

For deep-rooting trees and shrubs, Librel® Fe-HI solution may be applied to the root feeding zone using a pressure injector.

Librel® Fe-HI may also be applied through irrigation systems by periodically adding the equivalent of 1.0 kg per hectare in 10,000 liters of water. Frequency of addition will depend on the degree of deficiency.

Rates of use

Crop	Rates of use
Field crops	Apply 1.0 – 5.0 kg/ha
Trees	Apply 25 – 100 g per tree
Shrubs	Apply 0.5 – 2.5 kg per 100 bushes
Soft fruit	Apply 0.5 – 1.0 kg per 100 plants

These rates indicate upper and lower limits. Actual amounts used will depend upon the size of the crop and the degree of deficiency or both.

Safety and Labelling

Please refer to the safety data sheet for information on classification & labelling, safe use, handling and transport.

Disclaimer

January 2020