Librel® Cu

Copper EDTA Chelate
Product Information

Product Type
Micronutrient fertiliser conforming to the definition of an “EC FERTILISER”.

Description
Copper ethylenediamine tetra acetate disodium salt, (CuEDTA Na₂).

Intended Use
- To correct copper deficiency in most agricultural, horticultural and ornamental crops. Recommended for foliar or soil application.
- As a micronutrient source in hydroponics, liquid feed solutions and soilless growing media.

Typical Analysis
Copper (as Cu) 14% w/w

Analytical Method
Available on request

Appearance
Blue spray agglomerated microgranule

PRD-No.
30482695

Solubility (in water)
~350 g/l (at 20 °C)

Specification

Packaging
Detailed information on the packaging is available via BASF’s WorldAccount: https://www.worldaccount.basf.com (registered access).

Storage
Librel Cu will store indefinitely under normal conditions. For user convenience it is recommended that the product is stored in a dry place. Re-seal partly used packs tightly.

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

Harmonised Tariff No.
2922-4985-90

Health & Safety
Detailed information on the product described in this leaflet can be found in our relevant Health and Safety Information (Material Safety Data Sheet) available via BASF’s WorldAccount: https://worldaccount.basf.com (registered access).
Directions for Use

General Information
Librel Cu gives best results when crops have adequate supplies of water and major nutrients and are not under stress for any other reason. Conditions that 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
Simply add the powder to water while it is being agitated, do not pre-mix. Continue agitation for a short while to ensure complete dissolution.

Compatibility
Librel Cu is compatible with all other Librel chelates and many crop care chemicals. It is also fully compatible with solutions containing soluble phosphates such as liquid feeds and foliar fertilisers.

Foliar Application

General Information
Librel Cu should be dissolved in a convenient volume of water to suit the spraying machine being used and the target crop leaf area. The following points should be observed.

1. The sprayer should be fitted with nozzles that produce a fine mist.
2. Only sufficient spray solution should be applied to coat the leaves and stems with a film of moisture with little or no “run off”.
3. Spraying should be carried out on a calm day but not during strong sunshine or high temperatures. The best time is late afternoon or evening.
4. If rain is imminent, spraying should be postponed. If rain falls within 4 hours of spraying, the crop should be re-sprayed 3 or 4 days later.

Fruit Crops
Do not exceed a solution of 0.1% (1 g/l) for any one or combination of Librel chelates. Some fruit varieties and cultivars can exhibit unpredictable sensitivity to EDTA chelates. Where local experience of successful use is not available, we strongly recommend small-scale test applications before wide spread use.

Rates of Use and Timing

<table>
<thead>
<tr>
<th>Crop</th>
<th>Rates of Use (kg/ha)</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter cereals</td>
<td>0.25 – 0.75</td>
<td>Apply as soon as active growth recommences in early spring. An additional half rate application at the flag stage (ZCK 37 – 39) is also beneficial</td>
</tr>
<tr>
<td>Other crops</td>
<td>0.25 – 0.75</td>
<td>Apply as soon as there is sufficient leaf area to absorb the spray</td>
</tr>
</tbody>
</table>

Water Volume
The amount of Librel Cu to be applied should be mixed with a volume of water appropriate to the crop leaf area of the type of spraying machine being used.

Arable crops: 200-600 litres per hectare.
NB: Do not exceed a solution concentration of 0.1% (1 g/l).

Wetting Agent
Unless Librel Cu is to be applied with a pesticide containing sufficient wetter, then a standard, agricultural non-ionic wetting agent should be used as recommended by the manufacturer.

Small Scale Use
For example using a knapsack sprayer. Prepare a 0.05 – 0.1% (0.5 – 1.0 g/l) solution and apply so as to coat the leaves and stems with a thin film of moisture with little or no run-off.

Soil Application
General Information
The appropriate amount of Librel Cu should be dissolved in a convenient volume of water to suit the application equipment and to ensure even ground coverage.

General Crops
Apply as a coarse low pressure spray immediately before the last cultivation prior to sowing or planting. Where crops are established, apply between the rows.

Perennial Crops
Apply as a coarse low pressure spray in a wide circular band under the limit of the full branch spread. For best results, nutrients should be in the root zone before seasonal growth begins and this can be achieved by appropriate application timing.

Rates of Use
Apply 0.5 – 2.0 kg/ha depending on the degree of deficiency crop size etc.

Hydroponic Application

Rates of Use
1 ppm (15.74 µmol/l) copper can be achieved by adding 7.15 g of Librel Cu per 1000 litres of solution.

Statutory Caution
To be used only where there is a recognised need. Do not exceed the appropriate dose rate.

Note
This document, or any answers or information provided herein by BASF, does not constitute a legally binding obligation of BASF. While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. It does not relieve our customers from the obligation to perform a full inspection of the products upon delivery or any other obligation. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE.

May 2010