



TRACE ELEMENTS COMPLEXED WITH Lignosulfonic Acid (LS)



STRENGTHS

- **High availability and rapid absorption** – The trace elements complexed with LS are easily absorbed by plants through both roots and leaves.
- **Without CHLORATES and PERCHLORATES.**
- **Stable over a wide pH range (4–9)** – Effective in soils with variable or even alkaline pH.
- **Gradual and continuous nutrition** – Slowly release nutrients, avoiding waste and toxicity.

FEATURES

In compliance with European regulations and in response to the growing international demand for fully organic chelated products, **Fertenia** has developed a new line of trace elements – Iron (Fe), Zinc (Zn), and Manganese (Mn) – complexed with Lignosulfonic Acid (LS). This line also includes balanced mixtures of multiple micronutrients complexed with the same agent. The trace elements complexed with **LS** are nutrients chemically bound to a natural substance derived from wood. This complexation process gives the metallic cation greater stability and facilitates its absorption by plants. In practice, lignosulfonates act as natural carriers, improving the assimilation of these elements within plant tissues and enhancing their availability and efficiency even in alkaline soils (pH 4–9).

They are suitable for both soil and foliar applications, ensuring excellent agronomic performance.

Unlike **simple mixtures, true chelated or complexed products** ensure consistently high performance. In accordance with EU regulations, the label must indicate the actual percentage of metal that is complexed.

ADVANTAGES

- **Free from phytotoxicity** – Safe for foliar treatments, even under high temperatures.
- **Approved for use in organic farming.**
- **Enhance plant growth and chlorophyll content.**
- **Low environmental impact.**
- **Versatile applications** – Suitable for all crops, at any phenological stage, and with good

PRODUCT	Composition % w/w	Complexed Metal fraction	pH (1%)	Formulation
Lignofert Fe-LS	11,0 -12,0%	100%	3,5±0.5	Brown water-soluble powder
Lignofert Mn-LS	11,0 -12,0%	100%	4,0±0.5	Brown water-soluble powder
Lignofert Zn-LS	11,0 -12,0%	100%	4,0±0.5	Brown water-soluble powder

COMPOSITION % w/w

Lignofert MIX-LS	Fe 6,8%	Mn 2,6 %	Zn 1,1%	B 0,9%	Cu 0,3%	Mo 0,2 %
Complexed Metal fraction	pH (1%)	Formulation				
Min. 80%	3,5±0.5	Brown water-soluble powder				

DOSES AND METHOD OF USE

FOLIAR APPLICATION	ALL CROPS	1,5-2 kg/ha
FERTIGATION	ALL CROPS	5-8 Kg/ha



PACKAGE

Bags
1 Kg (12X1)
5 Kg (4x5)



*Allowed
in Organic
Farming*

INDUSTRIAL PRODUCTION FOR THIRD PARTIES

N.B.: It is possible to create customized productions in terms of single or complexed concentrations of all trace elements.

FERTENIA s.r.l.

SPECIAL AND BIOLOGICAL FERTILIZER INDUSTRY

Via Luca Giordano, 12 - Zona Industriale
84092 Bellizzi (Salerno) Italy

Tel. 0828 354461 - Fax 0828 355980 - info@fertenia.com - www.fertenia.com