



**PRODUCT INFO
& DATASHEET**

CHELASTAR SINGLE ELEMENT CHELATES

CHELASTAR MAGNESIUM 10% MgO (6% Mg) EDTA PREMIUM MICROGRANULAR MAGNESIUM CHELATE

Revised 06/2020

1. INTRODUCTION

* The CHELASTAR EDTA chelates are **produced using a unique patented micro-granulation process.**

This method guarantees a strawberry-shaped microgranule that is free flowing, dust-free and caking-free, and easily soluble. As probably Belgium's main specialist in chelated micronutrients, SAP International Corporation offers also a line of trace element mixes, next to its line of single element micronutrients. This line of products contains a set of chemical mixtures of trace elements (compounds) and of physical mixtures of trace elements (blends).

Where required macronutrients and/or additives as amino acids and humic acids can be added to our blends of trace elements. Mainly used for nourishing plants in fertigation systems and as an ingredient for NPK's. EDTA chelates will not injure leaf tissue, which makes the product also ideal for foliar spraying.

* **What is EDTA ?**

EDTA, short for ethylenediaminetetraacetic acid, is a chelate, which protects nutrients against precipitation in a moderate pH-range (pH 4 – 6.5). It has a similar pH-range to DTPA and the biodegradable IDHA chelate. The stability constant of EDTA is moderate, though slightly less than the stability constant of DTPA chelate.

2. PRODUCT SPECIFICATIONS

a) **Description**

Brand name : CHELASTAR Magnesium 10% MgO EDTA
 Chemical formula : $C_{10}H_{12}N_2O_8Na_2Mg$
 Chemical name : Ethylenediaminetetraacetic acid, magnesium-disodium complex
 Appearance : white-yellow microgranules

b) **Chemical composition**

Magnesium Oxide (MgO) EDTA chelated : 10% +/-0.4% w/w
 Magnesium (Mg) EDTA chelated : 6% +/-0.4% w/w

c) **Physical properties**

Density : 0.65 +/-0.1 g/cm³
 pH : 7.0 +/-1.0 (in 1.0% water solution)
 Conductivity (CE) : 3.9 +/-0.2mS/cm (in 1% solution)
 Percentage of nutrient chelated : 100 %

d) **Heavy metals**

Arsenic (As) : < 0.5 mg/kg
 Cadmium (Cd) : < 2 mg/kg
 Chrome (Cr) : < 2 mg/kg
 Mercury (Hg) : < 0.01 mg/kg
 Lead (Pb) : < 1 mg/kg

3. PRODUCT CHARACTERISTICS

- A unique porous micro-granule: dust free, no caking and easily soluble. Blue.
- Protection of the micro-nutrient against precipitation in a moderate pH-range (pH 4-6.5).
- For fertigation, foliar and as raw material in NPK's.
- Compatible with most water-soluble fertilisers.

4. RECOMMENDED APPLICATIONS & DOSING INSTRUCTIONS

a) **Foliar applications**

Crop	dosage in kg/ha	Amount of water in l/ha	Application date
Cereals	0.5 kg/ha 0.5-1 kg/ha	500 l water 500-1000 l water	2 applications : - 3 leaves stage - propagation phase
Potatoes	0.3-0.6 kg/ha	300-600 l water	3 weeks after germination
Sugar beet	0.3-0.6 kg/ha	300-600 l water	Before intercrop densening
Rape	0.3-0.6 kg/ha	300-600 l water	Before blooming

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SICO FERTILISERS
 EVERY TIME THE RIGHT SOLUTION



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Fruits general Preventive treatment: Curative treatment:	0.1-0.2 kg/ha 0.2-0.4 kg/ha	400-600 l water	1 application, after blooming 3-4 applications
Vegetables and flowers	0.2-0.4 kg/ha	400-600 l water	3-4 applications, depending on crop

In the case of foliar feeding as part of a spray-mix, testing the intended spray-mix on a small area is recommended prior to commercial treatment.

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

b) Fertigation

kg/1000 l water	Magnesium (Mg) content	
	g/1000 l water/ppm	mmol/l
0.1	6	2.4
0.5	30	12.3
1.0	60	24.6
1.5	90	37.0

Crop	Total dosage in kg/ha	Application date
Strawberry	0.5 – 1 kg/ha	3 applications: - just before blooming (white bud-stage) - at fruit growth - after harvest
Banana	2 - 3 kg/ha	3 applications: - 1x: establishment stage - 2x: during intensive vegetative growth
Stone fruit	1 - 2 kg/ha	3 applications: - just after fruit setting - during intensive vegetative growth - after harvest
Citrus	1 - 2 kg/ha	3 applications: - at fruit setting - at fruit filling - after harvest
Vegetables & flowers	0.5 - 1 kg/ha	3-4 applications: - 4-6 leave stage - during intensive growth

The pH in the tank should be above 4.

5. PACKINGS

Available in packings of 1, 5, 10, 25 and 1000 kgs.