



**PRODUCT INFO
& DATASHEET**

CHELASTAR SINGLE ELEMENT CHELATES

CHELASTAR Fe-DTPA 6% LIQUID

Suitable for fertigation in high tech soilless systems and for open field irrigation & hydroponic systems.

1. INTRODUCTION : What is DTPA ?

DTPA, short for Diethylene triamine pentaacetic acid complex or for Pentetic acid, protects the Iron molecule against precipitation in a moderate pH range (pH 4 - 7), similar to EDTA and the biodegradable IDHA chelate. The stability constant is moderate to high, higher than the stability constant of EDTA chelate. DTPA chelate is specially suitable for hydroponic systems.

2. PRODUCT SPECIFICATIONS

a) Description

Brand name : CHELASTAR Fe-DTPA 6% liquid
Chemical formula : $C_{14}H_{26}N_5O_{10}Fe$
Chemical name : Diethylenetriaminepentaacetic acid, ferric-diammonium complex
Appearance : transparent red-yellow liquid

b) Chemical composition

Iron (Fe), DTPA chelated : 6% w/w +/- 0.05% / 7.6% w/v +/- 0.05%

c) Physical properties

Density : 1.28 g/cm³
pH : 6.0 – 8.0 (in 1.0% water solution)
Conductivity (CE) : 3.0 mS/cm (at 20 °C in 1.0% water solution)
Water insoluble : max 0.01 %
Percentage of nutrients chelated: 100%

3. PRODUCT CHARACTERISTICS

- Liquid: transparent red-yellow
- Sodium-free
- Protection of the micronutrient against precipitation in a moderate pH-range (pH 4 - 7)
- Intended for fertigation systems. Suitable for fertigation in high tech soilless systems and for open field irrigation
- Compatible with most water soluble fertilizers

4. RECOMMENDED APPLICATIONS & DOSING INSTRUCTIONS

Fertigation

| l/1000 l water | Iron (Fe) content | |
|----------------|--------------------|--------|
| | g/1000 l water/ppm | mmol/l |
| 1 | 76 | 1.4 |
| 5 | 380 | 6.8 |
| 10 | 760 | 14.0 |

The pH in the tank should be above 4.

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.

5. PACKINGS

Available in packings of 1, 5, 10, 20 and 220 l and IBC.