



# SICALNIT + MAG horticultural grade, 13.5% N + 16.5% CaO (11.8% Ca) + 6% MgO (3.8% Mg) Calcium Nitrate + Magnesium (in pastille form)

- Made in E.U. -

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## 1. INTRODUCTION

Our Calcium formulations and Calcium + Magnesium derivates come as solid and as liquid formulations. Both formulations are suitable for fertigation of high-tech covered crops as well as foliar feeding.

Our line of calcium derivates is extensive. Next to our basic derivates of Calcium Nitrates (SICALNIT) and Magnesium Nitrates (SICO-MAGNIT), Sap International Corporation also has the opportunity to add specific chelated trace elements to its formulas. The chelating agent is usually the standard EDTA chelate, but can in some cases also be the biodegradable IDHA chelate.

## 2. PRODUCT SPECIFICATIONS

a) Description

Brand name : SICALNIT + MAG horticultural grade, 13.5% N + 16.5% CaO + 6% MgO

Chemical name : Calcium Ammonium Nitrate / Magnesium Nitrate

Chemical formula : CaNH<sub>4</sub>(NO<sub>3</sub>)<sub>3</sub>/MgNO<sub>3</sub> Appearance : flakes, white/yellowish

b) Chemical composition / typical & analysis (w/w)

Total N : 13.5 % +/- 0.3% +/- 0.3% Nitrate-N (N-NO<sub>3</sub>) : 13.1 % Ammoniacal-N (N-NH<sub>4</sub>) : 0.4% +/- 0.1% CaO : 16.5% +/- 0.5% Ca : 11.8% +/- 0.5% MgO : 6.0% +/- 0.3% : 3.8% +/- 0.3%

Chloride (Cl) : < 0.015%

c) Physical properties

Density : 0.9 +/- 0.05 g/cm3

pH : 6.2 + /- 1 (in 1% solution) - 6.5 + /- 0.5 (in 10% solution) - 6.2 + /- 1.3 (in 5% solution)

Water insolubles : < 0.01%

Electric Conductivity (EC) : 1.1 +/- 0.2 mS/cm (in 0.1% solution)

Solubility : 2200 g/

c) Heavy metals

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

# 3. PRODUCT CHARACTERISTICS

- Fully water-soluble product in the form of pastilles.
- Ideal combination of supplying calcium and magnesium.
- Free of chloride, sodium and other detrimenal elements for plants.
- Resistant to caking, due to its unique pastille shape.
- Used as a foliar and for fertigation purposes.
- Guarantees a quick reaction from the plant, especially when used as a foliar.

# 4. RECOMMENDED APPLICATIONS & DOSING INSTRUCTIONS

## a) FOLIAR

Crop	Application data	Concentration of spray solution
Cabbage, cauliflower	3 – 4 applications :	
	- as of 5 weeks after planting, weekly interval	0.5 – 0.8% (w/v)
Carrot, onion	2 to 3 applications :	0.3 - 0.5% (w/v)
	- as of beginning of intensive growth, 7 to 10 days interval	







Citrus, banana, fruit (apple)	1 - 2 applications : - as of the end of flowering / beginning of fruit setting - during intensive plant growth	0.3 – 1.0% (w/v) 0.3 – 1.0% (w/v)
Flowers, open field	3 – 5 applications: - as of the beginning of intensive plant growth, 10-14 days interval.	0.5 – 1.0% (w/v)
Olives, grapes	3 – 5 applications : - as of the beginning of fruit setting - during intensive plant growth	0.6 - 0.8% (w/v) 0.6 - 0.8% (w/v)
Strawberry	1 – 2 applications : - at the beginning of fruit setting.	0.3 – 0.4% (w/v)
Tomato, cucumber	3 – 5 applications : - as of the beginning of intensive growth, 10-14 days interval.	0.5 – 0.8% (w/v)

### b) FERTIGATION

Crop	Application data	Concentration of solution
Citrus, banana, fruit (apple), strawberry, flowers (open field)	During periods of intensive plant growth and during fruit development stage.	0.03 – 0.15% (w/v)
Olives, grapes	During periods of intensive plant growth and during fruit development stage.	0.1 – 0.2% (w/v)
Tomato, cucumber	Throughout the crop cycle, especially during fruit development stage.	0.05 – 0.07% (w/v)

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

#### **5. COMPATIBILITY**

SICALNIT + MAG Horticultural Grade is compatible with pesticides, thought it is advisable to confirm compatibility of your intended spray-mix by preparing a sample of the spray materials at their recommended concentrations in order to rule out the possibility of a detrimental cross reaction. This mixture should be sprayed into a small area prior to commercial treatment, in order to assess whether an adverse effect occurs.

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## 6. PACKINGS

- In 25 kg white plastic bags with label on pallets, 22.5 MT/20ft fcl.
- In 1000 kg big bags with label, 20 MT/20ft fcl.



