



PRODUCT INFO
& DATASHEET

SICO-MAGNIT® PRILLS

Magnesium Nitrate Hexahydrate, prills

10.8 % N + 15.4 % MgO

Soluble fertiliser (ideal for foliar spray, fertigation, hydroponics etc)
- Made in China -

08/2023

1/ PRODUCT DESCRIPTION

Brand name:	Sico-Magnit Prills
Chemical name:	Magnesium Nitrate Hexahydrate (prills)
Chemical formula:	$Mg(NO_3)_2 \cdot 6H_2O$
Molecular weight:	256.41
CAS No:	13446-18-9
HS Code:	28342990
Appearance:	white prills



2/ PROPERTIES & APPLICATIONS

Properties

100% water soluble Nitrogen and Magnesium fertiliser, white round prills/granular, free flowing, dissolves quickly in water.

Application

SICO-MAGNIT PRILLS is a 100% water soluble and fast-effective fertiliser used directly for fertigation application, hydroponic use, irrigation systems, or as raw material to make liquid plant nutrients and foliar fertilisers.

It dissolves quickly in water without any residues, providing plants with a supply of nitrogen in the nitrate form and magnesium they need during most growth stages.

It is suitable for crops grown in soil as well as for soilless hydrocultures, free from chlorides, sodium and heavy metals, **is a high-efficiency environmental protection greening fertiliser.**

SICO-MAGNIT PRILLS can also be used in concentrated nitric acid as dehydrator, in producing explosives, catalysts and other magnesium salt, as well as incineration agent for wheat.

SICO-MAGNIT PRILLS are an innovative and patented product.

3/ CALCULATED % ANALYSIS & SPECIFICATIONS

Any information in this publication is believed to be accurate and is given in good faith, but is for the customer to satisfy itself of the suitability for its own particular purpose. No representation, warranty or guarantee is made to its accuracy, reliability or completeness.

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Technical specification	Standard	Analytical method
Magnesium oxide (MgO)	min. 15.4 %	EDTA titration / GB/T 19203-2003
Nitrogen (N)	min. 10.8 %	Titration after distillation / GB/T22923-2008
Water insolubles	max. 0.05 %	NY/T 1973-2010
Iron (Fe)	max. 0.001 %	NY/T 1974-2010
Ph value	min. 4.0	NY/T 1973-2010
Heavy metals		
Pb	max. 5 ppm	NY/T 1978-2010
Hg	max. 5 ppm	NY/T 1978-2010
Cr	max. 5 ppm	NY/T 1978-2010
Cd	max. 5 ppm	NY/T 1978-2010
As	max. 5 ppm	NY/T 1978-2010
Size (1-3 mm)	min. 95%	SN/T 0736.3-2011

4/ USE & DOSAGE RECOMMENDATIONS

General dosing instructions

G/1000 l stock solution	N-NO ₃ In g/1000 l or ppm	Mg In g/1000 l or ppm	MgO In g/1000 l or ppm
100	10.5	9.6	15.6
130	13.6	12.4	20.2
160	16.8	15.3	25.0
190	20.0	18.2	29.6
210	22.0	20.1	32.7

The table above represents the amount of nutrients in the stock solution. The final concentration in the irrigation water depends on the amount of nutrients in the stock solution as well as the injection ratio.

Dosing instructions / Fertigation

Crop	Application date	Total dosage in kg/ha
Fruit trees	Just after flowering stage	100-200 kg*
Vineyards (adult table grapes)	Just after bud opening until main vegetative growth stage.	100-150 kg
Vegetables	As of start vegetative growth until beginning of fruit setting.	150-300 kg
Processing vegetables		
- potatoes	As of tuber initiation 10 days before end of tuber enlargement.	100-200 kg
- tomatoes	As of 1 month after planting until maturation stage.	150-300 kg

* Total dosage is subject to soil and climatic condition.

Dosing instructions / Foliar

Crop	Application date	Total dosage in kg/ha	Concentration of spray solution.
Fruit trees	3-4 applications : - starting just after flowering period	3-8 kg/ha*	0.5-1.5% (w/v)
Field crops :	1 to 2 applications :		
- Corn	- after 5 leave stage	3-6 kg/ha	1.0-1.5% (w/v)
- Rape	- from vegetative growth until flowering	3-6 kg/ha	1.0-1.5% (w/v)
- Winter wheat	- as of stem elongation until flowering	3-6 kg/ha	1.0-1.5% (w/v)
- Sugar beets	2 to 3 applications : - during spring time.	3-8 kg/ha	1.0-2.0% (w/v)



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Citrus	2 to 4 applications : - in spring time, as growth of leaves	5-10 kg/ha	1.0-2.0% (w/v)
Olive	2 applications : - just before full flowering - 3-4 weeks after flowering	3-9 kg/ha 3-9 kg/ha	0.5-2.0% (w/v)
Vineyards : - adult table grapes	3-4 applications : - to prevent drying of the stalk, 10 days interval	3-9 kg/ha*	0.5-1.5% (w/v)
Vegetables : - Melon	2-5 applications : - at the vegetative stage until blooming of female flowers	3-10 kg/ha*	0.5-1.5% (w/v)

* Depending on amount of water used.

The above mentioned indicated dosage and application stages are subject to soil and climatic conditions, possible use of manure, 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 and plant analyses.

5/ COMPATIBILITY

SICO MAGNIT is compatible with pesticides, though 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 onto small area prior to commercial treatment, in order to assess whether an adverse effect occurs.

6/ PACKING

Packed in 25kg net wpp+pe bags, about 26.5 MT/20ft container (loose bags) or 1000 kg or 1200 kg big bags. Product is not dangerous goods for transport.

7/ PROTECTION & SAFETY

Operators should wear protective smock including respirator and rubber gloves etc. Be careful not to inhale the powder of magnesium nitrate to protect respiration apparatus. In case of a fire: use water, soil or other fire extinguishing media but aqueous solution must be prevented to flow towards inflammable materials.

8/ HANDLING & STORAGE

Store in a ventilated and dry warehouse with roof. The bags must be sealed up and protected from moisture. Avoid mixing with organic compound or sulphur during storage and transportation. Store away from direct sunshine, rain and snow. Handle carefully.