

PRODUCT DATA SHEET

Product:

Sanbio® EPSOMIT

DESCRIPTION

EPSOMIT is a premium immunity activator and growth stimulant for stress control and increase of productivity on all crops. EPSOMIT with its powerful formulation acts in the plant cells and by that it triggers the defensive and vegetative processes in the plant. EPSOMIT increases the tolerance and resistance towards environmental and pathological stress by activating the whole plant physiological system. EPSOMIT activates the metabolism that results in enhanced development of root system, shoots, leaves, fruits, improved mobilization and assimilation of nutrients, vegetative growth, early flowering and maturation, improved fruit quality and long storage life.

MAIN ADVANTAGES

The advantages of EPSOMIT are:

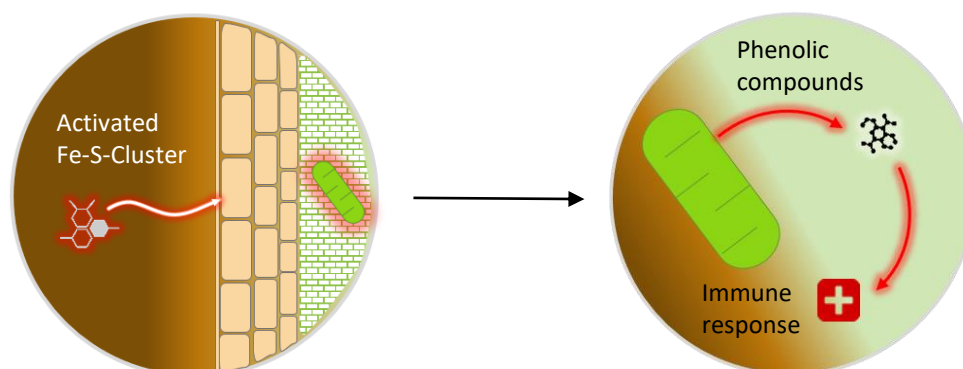
- Improving crop yield, quality and storage parameters
- Increasing environmental stress tolerance
- Higher resistance against infections and pests
- Better utilization of nutrients and water
- Better growth under extreme conditions.

DECLARATION

EC FERTILIZER MgO+SO₃ (18.2+35) // Activator

MODE OF ACTION

EPSOMIT combines the core functions in one product: plant nutrition, growth stimulation, stress control and natural crop protection. The effectiveness of the crystalline ferti-activator EPSOMIT is based on the activation of raw material by the SANBIO Biocatalytical Stimulation Technology. The mechanism of electrical stimulation of plant cells makes the difference of EPSOMIT versus conventional products acting on chemical mechanisms only.



RAPID ACTION. The powerful formulation leads to an instant adsorption through the leaves and transport into the plant cells. There, EPSOMIT triggers the defensive and vegetative processes.

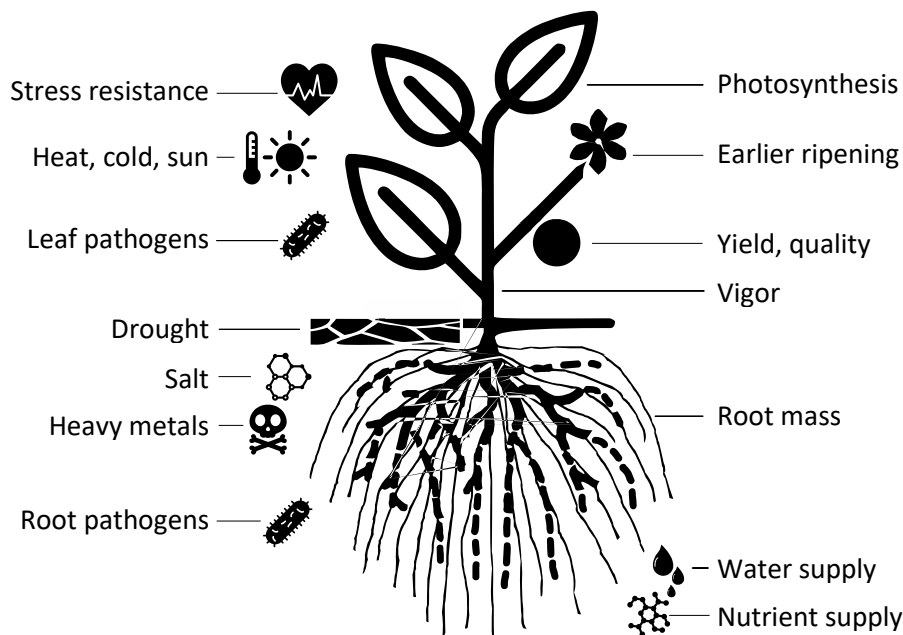
CROP POWER. EPSOMIT enhances the formation of chlorophyll content which intensifies photosynthesis, accelerates growth and increases biomass.

GROWTH CONTROL. The activation of whole plant physiological system boosting the excretion of phytohormons (Gibberellin, Cytokinin, Auxin, Ethylene). These catalysts intensifying the metabolic processes and enhancing the vegetative growth.

FULL ACCESS. The rapid and significant development of root mass ensures good access, transport and assimilation of essential nutrients, elements and water. Optimal supply can save artificial fertilizers and water.

STRONG AND VITAL. EPSOMIT is equipped with a stress control system. The activation of immune system on cellular level (immune response) enhances the tolerance towards abiotic stress factors and resistance towards biotic stress factors. The plant is able to adapt herself to disorders (soil toxicity, salinity) and unfavourable conditions (heat, cold, frost, drought, flood). The integrated biological protection system reduces the impact of fungal infections, pathogens and pest attack. As a result, a profitable growth is possible even under extreme conditions, loss can be minimized. EPSOMIT works systemically, preventively and curatively with associated natural mechanisms.

QUICKER. BIGGER. BETTER. EPSOMIT accelerates the plant vigor (early flowering, ripening, harvest), and increases the yield significantly. The fruits show improved quality (appearance, sugar content, taste) and storage parameter (shelf time, stability).



COMPOSITION

Parameter	Unit	Result
Activated ^{*)} Magnesium sulphate heptahydrate (MgSO ₄ ·7H ₂ O) calculated as MgSO ₄	% w/w	49.0
Water of crystallisation (H ₂ O)	% w/w	51.0

^{*)} processed by SANBIO Biocatalytic Stimulation Technology

PHYSICO-CHEMICAL PARAMETERS

Parameter	Unit	Result
Appearance	-	Crystalline
Color	-	White
Odour	-	Very faint
Dry matter	% w/w	63.4
pH value	at 20.7°C	6.8
Salinity	g/l OS	104
Solubility in water at 20°C	g/l	342
Density	g/cm ³	1.7
Granulometry <1,0mm	%	65
Granulometry D ₅₀	mm	0.8
Bulk density	kg/m ³	950

ELEMENTS

Parameter	Unit	Result
Magnesium oxide MgO	% w/w	18.2
Sulphur trioxide SO ₃	% w/w	35.0
Iron Fe	% w/w	0.00051

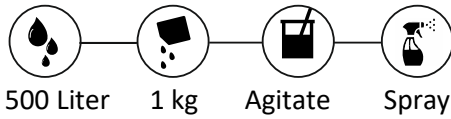
DIRECTIONS OF USE

EPSOMIT is designed for use in the cultivation of all types of agricultural and horticultural crops.

FOLIAR APPLICATION (recommended):

Crops	Application time	Single rate
Soil-grown agricultural crops Cereals, Pulses, Vegetables and Melons, Fruits, Nuts, Oilseeds, Sugars and Starches, Fibres, Beverages, Narcotics, Spices, Condiments, Rubber Forages, Green and Green leaf manure, Lawns	<u>First application</u> should be done in the early growth period (tillering, 3-5 leaves visible, stem elongation). <u>Subsequent applications</u> can be done optional during the shoot phase until end of flowering phase.	1 kg/ha
Trees	<u>First application</u> should be done in the early growth period at white/colored bud stage. <u>Subsequent applications</u> can be done optional during the shoot phase until end of flowering phase.	1 kg/ha/1m crown-height

OPTIMAL WORKING SOLUTION: Fill tank with 500 Liters of water. Add 1 kg of EPSOMIT. Agitate well. The working solution should be applied promptly. Maintain agitation throughout the fertigation process.



OPTIMAL NUMBER OF TREATMENTS: 1-2.

FOLIAR SPRAY is recommended for best results and instant actions independently of pH value of soil. Applications should be made at cold conditions for optimum results. Avoid extreme daytime temperature or strong sunshine during application. Repeat on demand. Wait at least 14 days between two applications.

FERTIGATION (alternative): Use working solution of total application rate of 500L/ha. Apply onto ground close to the plant. For soil-grown plants use every fourth fertigation cycle. For soilless cultures use several times during growth. Wait at least 14 days between two applications.

ROOT SOAK: Bare roots from trees or plants can be soaked in a working solution of 1% before plant out.

SOIL DRENCH: Apply soil drench around the root base of trees and plants or seedbeds in a 0.5-1% working solution.

SEED PRIMING: Soak seeds for 24 hours in a working solution of 10% with a total application rate of 5L/100kgs seed at room temperature. Re-dry prior sowing. Seeds must be sown within 1–2 days after priming.

COMPATIBILITY: Mixing with most fertilizers and plant protection chemicals is possible. It is recommended to conduct a small mixing test before use.

STORAGE

Store cool and dry. Temperature range +5...40°C. Protect from sunlight and frost.



SAFETY

Read SDS carefully.

Keep out of reach of children and animals.

Wear protection gloves and eye protection.

Avoid breathing dust/mist/spray.

Wash with water thoroughly after handling.



PACKAGE

1 kg sachet (PET/ALU/PE 12/12/75 sachet with tear-notch)

5/25 kg bucket (PE)

500 kg Bigbag

SHELF TIME

36 months in unopened packages. Opened packages should be stored tightly closed.

APPROVALS



Organic certified

The product meets following regulations:

Country	Standard	Link
Germany	Demeter Germany Demeter International FiBL Inputs list for the organic agriculture in Germany Gää Germany Naturland Germany Reg. (EC) 834/2007	→ http://www.betriebsmittelliste.de/de/bml-suche.html (enter company name)
EC	EC 834/2007, EC 889/2008	→ www.inputs.bio (enter company name)
USA	American Regulation NOP (National Organic Program)	→ www.inputs.bio (enter company name)
Tunisia	Liste des Engrais et Amendements du sol autorisés à être utilisés en Agriculture Biologique en Tunisie	→ www.ctab.nat.tn

COUNTRY OF ORIGIN

Federal Republic of Germany

PRODUCER

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<https://www.youtube.com/channel/UCcP8e0Ev1wGnI93x44IGfMg>

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OTHER INFORMATION

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