

Seerin- Magnesium Sulphate

Seerin-Magnesium Sulphate is a fully water soluble fertilizer, a high efficient source of Magnesium and sulphate for plants. As a nitrogen free fertilizer, **Seerin- Magnesium Sulphate** is the preferred source of Magnesium and Sulphate as a crystal form .when nitrogen fertilization should be limited. is a combination of magnesium and sulphur, both nutrients beneficial for plant health. Magnesium is involved in photosynthesis, so deficiency of this nutrient affects leaf colour. Sulphur activates plant enzyme systems. A deficiency of sulphur results in growth and colour changes. Plant requirements for sulphur are equal to those for phosphorus, although sulphur is not considered one of the primary plant nutrients. Observation of plant leaves provides information needed to diagnose nutrient deficiencies. However, because magnesium and sulphur symptoms look very similar related to other nutrients, it is necessary to distinguish between the symptoms of various nutrient deficiencies.

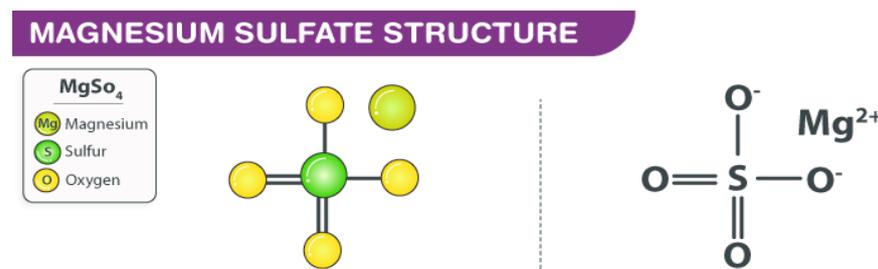
The advantage of seerin- Magnesium Sulphate

- Fully water soluble
- Consist of 100% plant nutrients
- Safe for plants and humans: has a moderately low pH and low salt index
- Suitable for fertigation, foliar application and production of fertilizer
- Essential Part of Chlorophyll.

Specification	Grade
Appearance	White crystalline
Magnesium (as Mg) % minimum	09.6
Lead (as Pb) % maximum	0.003
Sulphur (as S) % minimum	12.00
Matter insoluble in water % maximum	1.00

Product analysis

Structure of Mg Sulphate-



Water solubility

Water temperature (°C)	5	10	20	25	30	40
Solubility Gram/Litre	80	95	190	230	340	480

pH and EC

Magnesium Sulphate has moderately low pH that remains almost at different concentration.

Concentration %	0.5	1	5	10
pH	7.0	6.8	6.7	6.7

The EC increase substantially when high concentration of Magnesium Sulphate are used .

Concentration %	0.5	1	5	10
EC (mS/cm)	6.41	10.71	24.17	42.15



Application recommendation

Nutrigation

It is recommended to use **Seerin- Magnesium Sulphate** as a source of Magnesium and Sulphate. Because of its unique characteristic, Magnesium is the essential element for chlorophyll that provides the green color of plants. Therefore it is of all most importance for production of chlorophyll. Magnesium ions are involved in protein synthesis, various enzymatic reactions and production of vitamins.

Compatibility

Seerin- Magnesium Sulphate is compatible with most water-soluble fertilizers, except for fertilizers contain (Ca⁺⁺) or magnesium (Mg⁺⁺). To apply **Seerin- Magnesium Sulphate** in combination with potassium nitrate or ammonium sulphate and Urea.

Quantitative Nutrigation

Each kilogram of **Seerin-Magnesium Sulphate** in the tank provides 90.60 gram of Magnesium and 120 gram of Sulphate as a sulphur.

Proportional Nutrigation

The Magnesium and Sulphur concentration in the irrigation water depend on the quantity of **Seerin-Magnesium sulphate** in the tank mix and on the injection ratio. Use the following table to calculate the quantity of **Seerin-Magnesium sulphate** and the injection ratio needed to reach a given concentration in the irrigation water.

Seerin-SULFA™ G/1000liter water	Nutrient concentration (ppm,g/1000lit.)	
	Mg	S
100	9.6	12
130	12.48	15.6
149	14.30	17.88
185	17.76	22.20
370	35.52	44.40

Foliar Feeding

Foliar application of **Seerin -Magnesium sulphate** is an optimal supplement to soil fertilization at growth stage when high levels of phosphorus and potassium are required. It helps seeds germinate, makes plants growth bushier, produces more flowers, increases chlorophyll production and deters pests, such as slugs and voles. It also provides vital nutrients to supplement your regular Sulphur. Magnesium sulphate is a major component of proteins. It helps development of enzymes and vitamins. It is necessary in metabolism activation, photosynthesis, chlorophyll, and starch and sugar circulation. It is a major component of amino acids. Deficiency of sulphur causes light green colour formation in young leaves. Deficiency of sulphur is seen in soils with sand and low organic material content. If the plant cannot get enough sulphur, fruits do not develop in time. Besides sulphur helps in reducing pH values of basic soils.