Magnesium Sulfate/Sulphate Heptahydrate (Epsom Salt)

What is Magnesium Sulfate?

Magnesium sulfate (formula: MgSO₄·7H₂O) fertilizer is formed of water soluble, pure and crystal particles so as to cover magnesium deficiencies in your plants. It contains 15% MgO and 28% SO₃. As it is water soluble it can be applied via sprinklers or on leaves. Chemical and physical properties of magnesium sulfate are given below.

**Magnesium oxide (MgO) 15%**

**Sulfide tri-oxide (SO₃) 25%**

**Moisture at 25 centigrade 0,1%**

**pH 5.5 – 7.5**

**White crystals.**

It cannot be mixed with phosphorous fertilizers.

Where is it used?

Magnesium is the essential element for chlorophyll that provides the green color of plants. Therefore it is of utmost importance for production of chlorophyll. Magnesium ions are involved in protein synthesis, various enzymatic reactions and production of vitamins.

When magnesium is deficient, green color is lost in old leaves. In some plant spots are observed. High levels of magnesium
deficiency causes reddish purple colors in leaves. As deficiency level increases green parts get lost.

Sulfur in magnesium sulfate 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 sulfur causes light green color formation in young leaves. Deficiency of sulfur is seen in soils with sand and low organic material content. If the plant cannot get enough sulfur, fruits do not develop in time. Besides sulfur helps in reducing pH values of basic soils.

**Magnesium needs:**

Magnesium needs occur at times when magnesium is washed away from sandy soils; in plants which require high levels of magnesium; pH levels are too low and when high levels of ammonium, calcium and potassium fertilizers are used.

Cabbage, corn, cucumber, eggplant, melon, pepper, potato, tomato, watermelon, bananas, citrus fruits, apples and grapes are more sensitive to magnesium deficiencies.

**Application method:**

Magnesium sulfate may be applied via soil or leaves. To get fast and effective results from application magnesium fertilizers one should apply via leaves. The below given methods are recommended for application with sprinkler or via leaves.

For more info, please visit  Magnesium Sulfate product page
