

Combined Magnesium Fertilizer **AgroMag**[®]

AGROMAG[®] is a white, odorless powder containing no foreign impurities made of highly concentrated magnesium raw material — mineral brucite (magnesium hydroxide).

AGROMAG[®] is unique combined magnesium fertilizer with high neutralizing activity on the soils with excessive acidity.

Analysis, %

Mg (Magnesium)	34,5
Ca (Calcium)	1,5
Fe (Iron)	0,1

Benefits of AGROMAG[®]

- Provides a high level of magnesium both in plant and soil;
- Increases crop yields;
- Reduces soil acidity;
- Improves quality of crop;
- Effective both in field and hothouses;
- Makes NPK fertilizer more effective;
- Smooth and lasting action;
- Render no harm for plant's roots;
- Natural, harmless product;
- Can be applied with other agricultural chemicals;

Action of AGROMAG[®]

AGROMAG[®] can be applied as magnesium nutrients for wide range of crops in different areas such as agriculture, horticulture or hothouses. It fills in lacks of magnesium ions both in soils and plants. It contains trace a range of elements that activates all plant's functions. **AGROMAG**[®] is especially effective on soils with excessive acid activity (loamy soils or peat soils) or on sandy soils, where the lack of magnesium is especially considerable. Due to its weak alkaline effect, it smoothly reacts with organic acids in soils gradually stabilizing pH balance of soils. **AGROMAG**[®] influences the health of cattle and sheep flocks, since it increase magnesium level in plants and thus reducing risk of animal grass tetany disease.

Iron and Calcium are the second most important micronutrients for plants next to magnesium. These elements enhance magnesium intake.

The role of trace elements

Trace elements such as iron and calcium also play very important role in plant's healthy growth, blossoming and fruiting. They further increase magnesium intake.

Fe. Ions of irons are involved in the process of chlorophyll synthesis. It is a part of various enzymes regulating synthesis. Iron deficiency aggravates magnesium one.

Ca. Calcium increases intake of magnesium ions. Balance of calcium and magnesium ions is one of the most important equilibriums in plants. Calcium influences carbohydrates and protein metabolisms and process of root system formation.

MAGNESIUM deficiency consequences

Magnesium is one of the most vital elements in nature. It is an active center of energy generating pigment – chlorophyll. It is also active part of several other important compounds produced by plant's cells. Magnesium assists in the production of carbohydrates, proteins and fats, vitamin C and carotene, and is specific to many enzyme systems, – most valuable components that determine the quality of fruits. Different crops need different amounts of magnesium. Magnesium deficiency may be further aggravated by such "acidic" elements as nitrogen or phosphorus. The most demanding are the following: potato, fruit trees, berries, corn, and turf grass. These plants may further increase magnesium deficiency due to their annual harvest. Annual magnesium drain by these crops may be from 30 up to 150 kg per hectare.



MAGNESIUM deficiency symptoms

Deficiencies of magnesium of various severities are quite common all around the world. There is usually a loss of healthy green colour between the veins of the older leaves later spreading to younger leaves. This interveinal chlorosis may turn brown, leaves become brittle and older leaves may drop. In severe cases leaves may fall even during early summer period. Following symptoms may be visible:

- Strong yellowing between primary leaf veins;
- Clear border can be seen between yellowing parts of leaf;
- In severe cases, entire leaves turn yellow or even brown, initially beginning at leaf tips;

MAGNESIUM deficiency in soils

Deficiencies of magnesium also are very common in leached and acid soils. Especially they are very severe in soils with high levels of organic acids, leached or sandy soils, i.e. there where magnesium ions may be easily washed away by rains in form of water soluble magnesium salts. These facts lead to low crop yields, small size of fruits and their poor quality.

Due to its insolubility in water, **AGROMAG®** cannot be washed so easily out of the fertile layer. It dissolves in soil gradually, two or three years, thus supplying sufficient magnesium concentrations for better growth, blossoming and fruiting.

Application

AGROMAG® may be applied during each season except winter. However, for better correction of magnesium deficiencies and better yields, it is advised to apply it during spring or summer, when symptoms of magnesium deficiency become more apparent. **AGROMAG®** may be applied after harvesting as a stock in the soil for next spring.

It is advised to apply **AGROMAG®** in mixtures with seeds and other organic or mineral fertilizers by means of drill seeders or other machinery.

Spring

- Before budding (Trees and bushes);
- Before emerging of first sprouts (other plants);

Autumn

- After harvesting but before leaves fall (trees and bushes);
- After harvesting but before leaves turn yellow (other plants);

- Turf grass: The soil should be fertilized by **AGROMAG®** along with seeding.

Application rates

Application rates depend of crop and soil types, climate zone and purpose (magnesium fertilizer or soil acidity neutralization).

Application rates of **AGROMAG®** as fertilizer vary from 40 up to 80 kg per hectare.

For application rates of **AGROMAG®** soil acidity neutralizing agent please contact company's specialists.



RUSSIAN MINING CHEMICAL COMPANY LLC
Moscow, 36/1 Lusinovskaya street, Russian Federation
Phone/Fax: +7 (495) 789-65-30
Web: www.magminerals.ru
e-mail: info@magminerals.ru



**RUSSIAN
MINING CHEMICAL
COMPANY**