

# MAGNESIUM SULFATE KALCEKS 500MG/ML

# **Solution For Injection / Infusion**

Magnesium is the fourth most abundant essential mineral in the body. It is distributed approximately one half in the bone and one half in the muscle and other soft tissues; less than one percent in the blood. It is a cofactor for more than 300 metabolic reactions in the body<sup>1</sup>.

Magnesium Sulfate Injection is used to control low blood levels of magnesium. It is also used for pediatric acute nephritis. It is also used as the prevention of seizures in severe pre-eclampsia, eclampsia or toxemia of pregnancy.

Magnesium Sulfate came into medical use at least as early as 1618. Currently, Magnesium sulfate is on the World Health Organization's List of Essential Medicines, the most effective and safe medicines needed in a health system<sup>2</sup>.

#### Indications:

- Parenteral administration of magnesium sulfate is indicated in the treatment of acute hypomagnesaemia.
- Magnesium salts are also indicated to prevent hypomagnesaemia in patients receiving total parenteral nutrition.
- Magnesium sulfate is also indicated in the prevention and treatment of life-threatening seizures in the treatment of toxaemias of pregnancy (pre-eclampsia and eclampsia).

The product is intended for use in adults, adolescents and children.

## Method of administration

May be adminstered by intravenous and intramuscular routes. For method of administration provided for each indication, see package insert.

### Applications:

Magnesium is an intracellular cation with multiple functions:

- Magnesium is a cofactor enzymes of the glucose metabolism and those that participate in the degradation of nucleic acids, proteins, and fatty acids1;
- It regulates the movements of transmembrane ions<sup>1</sup>;
- Magnesium intervenes in the activity of several enzymes<sup>1</sup>;
- It inhibits smooth muscle contractions by its direct effect on calcium activity. Magnesium modulates calcium uptake by reducing calcium binding and distribution in the myometrium3.

# Magnesium Sulfate Kalceks 500 mg/ml solution for injection available:

Type I colourless glass ampoules with one point cut containing 10ml solution.

Product shelf life unopened: 5 years.

Product shelf life after opening the ampoules: Once opened, the product should be used immediately.

#### Special precautions for storage:

Do not store above 30°C. Do not freeze.

Pack size:

500 mg/ml: 10 ampoules of 10ml

Refer package insert for further information.

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