FAES FARMA

SUMMARY OF PRODUCT CHARACTERISTICS FOR PHARMACEUTICAL PRODUCTS

1 NAME OF THE FINISHED PHARMACEUTICAL PRODUCT

ACTIMAG 0.4 mg/mL ORAL SOLUTION

1.1 Strength

Magnesium pidolate 0.4 g per mL of oral solution

1.2 Pharmaceutical form

Oral solution

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

2.1 *Qualitative declaration*

Magnesium pidolate
Sucrose
Sodium saccharin
Methyl parahydroxybenzoate
Propyl parahydroxybenzoate
Carmoisine azorrubine (E-122)
Propylene glycol
Raspberry aroma
Mint aroma
Purified water

2.2 *Quantitative declaration*

Magnesium pidolate	40 g/100 mL
Sucrose	35 g/100 mL
Sodium saccharin	0.8 g/100 mL
Methyl parahydroxybenzoate	0.07 g/100 mL
Propyl parahydroxybenzoate	0.035 g/100 mL
Carmoisine azorrubine (E-122)	0.003 g/100 mL
Propylene glycol	5 mL/100 mL
Raspberry aroma	0.04 mL/100 mL
Mint aroma	0.01 mL/100 mL
Purified water	q.s.100mL

3 PHARMACEUTICAL FORM

Oral solution.
Red fuchsia, transparent, viscous, raspberry-mint flavoured solution.

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4 CLINICAL PARTICULARS

4.1. *Therapeutic indications*

ACTIMAG is indicated in the prevention of magnesium deficiencies.

4.2. *Posology and method of administration*

Posology

Adults: 5 mL twice a day.

Paediatric population 5 mL once a day (only on medical prescription).

The dose may be increased on medical criterion in the event of a major magnesium deficit.

4.3. *Method of administration*

Oral use.

4.4. *Contraindications*

Do not administer in cases of:

- Hypersensitivity to the active substance or to any of the excipients
- Kidney failure, risk of hypermagnesemia.
- Myasthenia.
- Chronic diarrhoea.
- Ileostomy.
- Symptoms of appendicitis
- Ulcerative colitis.
- Diabetic coma.
- Cushing's disease.

4.5. *Special warnings and precautions for use*

- Do not use this medicine continuously.
- Monitor blood magnesium levels.
- Ingesting Actimag on an empty stomach can cause diarrhoea.
- It must be used with caution in patients with calcium metabolism disorders.

This medicinal product contains carmoisine (E-122), which may cause allergic reactions. It may cause asthma, especially in patients who are allergic to acetylsalicylic acid.

This medicinal product my induce allergic reactions (possibly of a delayed nature) because it contains methyl parahydroxybenzoate (E-218) and propyl parahydroxybenzoate (E-216)-.

This medication contains sucrose. Patients with hereditary intolerance to fructose, poor absorption of glucose or galactose, or sucrase-isomaltase deficiency should not take this medicinal product.

4.6. *Interaction with other medicinal products and others forms of interaction*

The following interactions of magnesium with other drugs are documented:

Azole antifungal agents: the therapeutic effects of azole antifungal agents can be reduced, due to the possible increase in the pH of the stomach due to the magnesium salts contained in the medicinal

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product ACTIMAG. The antifungal agent, in this case, must be given at least two hours before magnesium.

Oral quinolones: the simultaneous administration or the administration of magnesium compounds, very close to the time of administration of an oral quinolone can produce a reduction in its absorption and, therefore, a reduction in the effectiveness of the quinolone. This is due to the possible formation of magnesium chelates with quinolones.

Tetracyclines: there may be a reduced response to tetracycline due to a reduction in their absorption by chelation with the (divalent) magnesium ion. Because of this, tetracyclines should be administered at least two hours before or after magnesium.

Sodium polystyrene sulfonate (SPS): metabolic alkalosis may be observed resulting from an increase in the absorption of unneutralised sodium bicarbonate. It can also result in a reduction of the reducing effect of potassium from SPS. The mechanism of action of these effects is the increase in the intestinal absorption of unneutralised bicarbonate due to the binding of magnesium with sodium polystyrene sulfonate. For this reason, if possible, the administration of ACTIMAG should be discontinued during therapy with PSS or otherwise intake should be spaced out by at least a few hours.

Delavirdine: the simultaneous administration of delavirdine with products that contain magnesium may reduce the absorption of delavirdine, which can lead to subtherapeutic levels. Therefore, the administration of delavirdine and antacids should be separated by at least 1 hour.

Quinidine: serum quinidine may rise, increasing the toxic and pharmacological effects of the drug. This is due to the increase in urinary pH possibly causing an increase in the renal tubular reabsorption of quinidine.

Digitalis glycosides: Magnesium can inhibit the absorption of the digitalis glycosides.

Alcohol and glucose: increase the excretion of magnesium.

Calcium: To avoid a phenomenon of competitive inhibition, it should not be administered with a concomitant calcium therapy. It can be administered, after a few days of pause, before or after.

4.7. *Additional information on special populations*

No additional information is necessary.

4.8. *Fertility, pregnancy and lactation*

Pregnancy

There is weak evidence that a magnesium supplement reduces the risk of a low perinatal rate. There seems to be no need for a magnesium supplement during pregnancy because magnesium deficiency is unlikely during this period.

Lactation

No problems have been reported in infants with the intake of normal daily magnesium requirements.

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4.9. *Effects on ability to drive and use machines*

No effects have been reported on the ability to drive and se dangerous machines.

4.10. *Undesirable effects*

In some cases, and always related to high doses, the following may occur: nausea, vomiting, hypotension, and diarrhoea.

If adverse effects occur, treatment should be discontinued, and they should be reported to the pharmacovigilance system.

4.11. Overdose

Although oral absorption of magnesium salts is relatively low, patients with impaired renal function can cause hypermagnesemia which is characterised by the following: hot flushes, slowing of heartbeat, depression of the central nervous system, muscle weakness, fatigue, drowsiness or hyper-excitability, nausea, vomiting, dizziness, hypotension due to vasodilation, confusion, respiratory depression, arrhythmias, coma, and cardiac arrest.

The hypermuscular block associated with hypermagnesemia is reversible by administering calcium salts. If kidney function is normal, fluids should be administered to remove magnesium from the body. If kidney function is reduced, or in the case of severe hypermagnesemia, it will be necessary to resort to dialysis.

The same is not the case for individuals with impaired renal function, in which case, by not being able to compensate for the excess with a greater excretion, major toxicity may occur. With magnesemias of 1.5 to 2.5 mmol/litre nausea, vomiting, bradycardia and hypotension; if the serum concentration of magnesium reaches 2.5-5 mmol/litre there is hyporeflexia, EEG abnormalities and general depression of the CNS; when magnesium serum exceeds 5 mmol/litre it causes respiratory depression, coma and asystolic cardiac arrest. The contribution of magnesium supplements to individuals with impaired renal function must be handled with caution.

5 PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Magnesium is an organic supplement, it is considered an essential mineral for nutrition. It participates in many enzyme systems involved in the production of energy from food. It is also actively involved in protein synthesis and in maintaining the electrical characteristics of the neuromuscular system.

5.2. Pharmacokinetic properties

Its bioavailability is 35%. Oral absorption increases with the presence of vitamin D. Approximately 30% of plasma magnesium is bound to proteins.

A total of 70% of plasma magnesium is filtered in the Bowman's capsule, of this, just 3.5% is ultimately excreted. In the proximal portion of the renal tubule, 20% to 30% of magnesium filtering is reabsorbed. It is mainly excreted in urine and a small amount in faeces.

A significant excretion of magnesium also occurs through bile and pancreatic and intestinal secretions: 0.4 moles/litre of bile, 0.5 mmol/ litre of gastric secretion and 0.05 mmol/litre of pancreatic juice. Virtually all magnesium segregated in this way is resorbed in the intestine.

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5.3. Preclinical safety data

The magnesium pidolate content in ACTIMAG provides, at the recommended dose, quantities of magnesium very far from those that can produce toxicity.

1 g of magnesium pidolate provides approximately 87 mg of magnesium ion. The maximum tolerated dose of magnesium is between 2 and 4 g/day.

No relevant mutagenicity, teratogenicity or fertility problems with magnesium have been recorded in animals.

6 PHARMACEUTICAL PARTICULARS

6.1. List of excipients

Sucrose
Propylene glycol
Sodium saccharin
Methyl parahydroxybenzoate (E-218)
Propyl parahydroxybenzoate (E-216)
Raspberry flavour
Mint flavour
Carmoisine colouring (E-122)
Water

6.2. Incompatibilities

Not applicable.

6.3. Shelf life

5 years.

6.4. Special precautions for storage

No special storage precautions are required.

6.5. Nature and contents of container

Glass amber bottle containing 100 ml of solution and supplied with a dosing measure.

6.6. Special precautions for disposal and other handling

Any unused product or waste material should be disposed of in accordance with local requirements.

7 MARKETING AUTHORISATION HOLDER AND MANUFACTURING SITE ADDRESSES

FAES FARMA, S.A.
Máximo Aguirre, 14

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8 MARKETING AUTHORISATION NUMBER

56.322

9 DATE OF FIRST REGISTRATION/RENEWAL OF THE REGISTRATION

Date of first authorization: 7 December 1984
Date of latest renewal: 30 June 2009

10 DATE OF REVISION OF THE TEXT

July 2009

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