

Knowledge grows

BOLIFOR® MGP

Magnesium Phosphate - Feed Grade

Sales specification

| Product Properties | |
|-----------------------------------|--------|
| Phosphorus (P) | 14% |
| Relative solubility of phosphorus | |
| - In 2% citric acid | 98% |
| - In alkaline ammonium citrate | 96% |
| Magnesium (Mg) | 24% |
| Calcium (Ca) | 1.5% |
| рН | 7-9 |
| Moisture | <4,5 % |

| Physical Properties | |
|---------------------|-------------------------------------------------------------------------------|
| Appearance | Fine granules >90% within 0.2-1.5 mm, guaranteed when delivered from factory. |
| Bulk density kg/m³ | 850-1000 |
| Water activity, aw | < 0.70 |

Identification

Chemical Formula : $MgHPO_4 \times 3H_2O$ CAS No. 7757-86-0

Inorganic feed material according to Regulation (EC) No 767/2009 of the European Parliament and of the Council and Commission Regulation (EU) No 68/2013.

Description

BOLIFOR MGP is a unique feed grade combination of magnesium and phosphorus produced by means of reacting phosphoric acid and a magnesium source in a granulator at precise conditions. The selected raw materials, of exclusively mineral origin, ensure high phosphorus digestibility and a level of undesirable substances well below that stipulated by EU feed legislation.

BOLIFOR MGP appears as off-white to grey granules. The product is highly soluble in diluted acids. BOLIFOR MGP is odorless and has a neutral taste.

Special advantages

Palatability plays a crucial role in the regulation of mineral consumption, especially when minerals are offered as free-choice. BOLIFOR MGP has been shown to be highly palatable, the perfect option to maximize phosphorus and magnesium consumption and foster mineral absorption by ruminants, even after experiencing a mineral deficiency. This would help the animal to better recover from mineral unbalances. BOLIFOR MGP has also shown outstanding phosphorus digestibility in swine. Trial results are available under request.



Recommended use/applications

BOLIFOR MGP is an excellent source of magnesium and phosphorus in concentrates, complete feed, mineral supplements and other mineral feed applications to prevent magnesium and phosphorus deficiencies in mainly cattle and horses but also pigs, poultry and all other animals.

Quality check references

| Total phosphorus (P) extraction | Comparable with Regulation (EC) No 2003/2003 method 3.1.1 |
|----------------------------------------------------|-----------------------------------------------------------|
| In 2% citric acid | Regulation (EC) No 2003/2003 method 3.1.3. |
| In alkaline ammonium citrate 98% | Regulation (EC) No 2003/2003 method 3.1.5.1 |
| Phosphorus Determination | Comparable with Regulation (EC) No 2003/2003 method 3.2 |
| Total magnesium (Mg) extraction and determination. | Comparable with Regulation (EC) No 2003/2003 method 8 |
| рН | 1% solution, in water |
| Ash insoluble in 3N HCl | Directive 71/250/EEC method 6 |
| Moisture (mechanical free water) | Acetone wash, ambient temperature |

Undesirable substances

| Undesirable substances | Standard specification | BOLIFOR MGP | Method of analysis |
|----------------------------------------------------------|------------------------|--------------|--------------------|
| Fluorine (F) | Max. 2 g/kg | < 2 g/kg | ISE |
| Arsenic (As) | Max.10 mg/kg | < 2 mg/kg | ICP-MS |
| Cadmium (Cd) | Max. 10 mg/kg | < 0.5 mg/kg | ICP-MS |
| Lead (Pb) | Max. 15 mg/kg | < 2 mg/kg | ICP-MS |
| Mercury (Hg) | Max. 0.1 mg/kg | < 0.05 mg/kg | ICP-MS |
| Dioxins (PCDD/F(BEQ)) | Max. 0.75 ng/kg | < 0.2 ng/kg | GC-MS/MS |
| Dioxins + dioxin-like PCBs (PCDD/F and dl PCBs (BEQ)) | Max. 1.0 ng/kg | < 0.3 ng/kg | GC-MS/MS |

^{*}Method of Test: Method 3.2 - EC Regulation No: 2003/2003/EC.

Classification, labelling and packaging

The product is not classified as hazardous according to EU regulations. Labelling conforms to Regulation (EC) No 767/2009 of the European Parliament and of the Council and to Commission Regulation (EU) No 68/2013.

Packaging available in 25, 1000 kg big bag and bulk.

Handling and storage

BOLIFOR MGP should be stored indoors in a dry and cool place in properly sealed packaging. When handled and stored according to instructions the shelf life is three years.

Transport and transport regulation

Transported on road, rail and by sea. Not classified as dangerous goods.

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Yara, Animal Nutrition is part of the Cefic Sector Group Inorganic Feed Phosphates

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