



Knowledge grows

# BOLIFOR<sup>®</sup> MAP

## Mono-Ammonium Phosphate - Feed Grade

Identification	
Chemical Formula	
NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>	
CAS No.	7722-76-1
EINECS No.	

Inorganic feed material according to Regulation (EC) No 767/2009 of the European Parliament and of the Council and Commission Regulation (EU) No 242/2010.

### Description

A unique feed grade combination of phosphorus and nitrogen produced by means of reacting phosphoric acid and a ammonia source in a granulator at precise conditions. The selected raw materials, of only mineral origin, and production process ensure a product with good phosphorus digestibility and a level of undesirable substances well below that stipulated by EU feed legislation.

BOLIFOR<sup>®</sup> MAP appears as off-white granules. The product is highly soluble in diluted acids. BOLIFOR<sup>®</sup> MAP is odourless and has a neutral taste.

Specification	
Phosphorus (P)	26 %
Relative solubility in	
2% citric acid	99%
neutral ammonium citrate	98%
Nitrogen (N)	8-11 %
Relative solubility in	
neutral ammonium citrate	95%
Calcium (Ca)	<1 %
pH	
Ash insoluble in HCl 3N	4.5%
Moisture (mechanical free water)	< 1%

### Recommended use/Applications

The excellent quality makes BOLIFOR<sup>®</sup> MAP a preferred source of phosphorus in concentrates, complete feed, mineral supplements and other mineral feed applications to prevent phosphorus deficiencies in fish and cattle.

### Special Advantages

- Considerably improved relative water solubility of P
- Superior chemical solubility gives BOLIFOR<sup>®</sup> MAP an excellent biological availability for P
- Minimum level of undesirable substances
- Consistent quality



## Physical Properties

Appearance	Fine granules >90% within 0.2-1.5 mm, guaranteed when delivered from factory.
Bulk density kg/m <sup>3</sup>	850-950
Water activity	$a_w < 0.70$

## Undesirable Substances EU Standards

Fluorine (F)	max 0.2%
Arsenic (As)	max 10 mg/kg
Cadmium (Cd)	max 10 mg/kg
Lead (Pb)	max 15 mg/kg
Mercury (Hg)	max 0.1 mg/kg
Dioxins (WHO-PCDD/F-TEQ)	max 0.75 ng/kg
Dioxins + dioxin-likePCBs (WHO-PCDD/F-PCB-TEQ)	max 1.0 ng/kg

\* Conforms to current EU legislation.

## Quality Check References

<b>Phosphorus:</b>	
Extraction:	
total	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 neutral ammonium citrate	Regulation (EC) No 2003/2003 method 3.1.4
Determination	Comparable with Regulation (EC) No 2003/2003 method 3.2.
pH	1% solution, in water
Ash insoluble in 3N HCl	Directive 71/250/EEC method 6.
Moisture (mechanical free water)	Acetone wash, ambient temperature

## 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 242/2010. Packaging available in bulk.

## Handling and storage

BOLIFOR® MAP 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.

Yara Animal Nutrition

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*The information above is intended to serve as guidelines and does Not constitute a guarantee. We reserve the right to make changes. Valid from: 2015-10-01. Replaces all previous data sheets. English*

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