

## **Knowledge grows**

# **BOLIFOR® CNF**

#### Calcium nitrate -feed grade – Monogastrics

BOLIFOR<sup>®</sup> CNF is an inorganic feed material with a low level of undesirable elements well below that stipulated by EU feed registration.

BOLIFOR<sup>®</sup> CNF appears as white prills with a consistent quality. The product is highly soluble in water.

#### Identification

Chemical formula: 5Ca(NO<sub>3</sub>)<sub>2</sub> × NH4NO<sub>3</sub> × 10H<sub>2</sub>O CAS No.: 15245-12-2

#### Special Advantages

The innovative production route of BOLIFOR<sup>®</sup> CNF used by Yara guarantees the most energy efficient way of manufacturing calcium nitrate as well as a lower carbon footprint compared to conventional production processes. BOLIFOR<sup>®</sup> CNF has minimum amount of undesirable substances, consistently.

When administered to sows during gestation, BOLIFOR<sup>®</sup> CNF is transformed into nitric oxide. Nitric oxide is a powerful blood flow enhancer, which improves oxygen and nutrient exchange to the foetuses and stimulates placental growth. This results in lower preweaning mortality.

BOLIFOR<sup>®</sup> CNF has shown to decrease the risk of post-parturient dysgalactia syndrome (PDS) by promoting a healthy gut flora in the sow. A healthy sow's gut microflora will positively influence the instauration of a balanced microflora in the new born piglets so that the litter gets off to a good start.

Besides, BOLIFOR<sup>®</sup> CNF has been shown to reduce sow's body weight loss during lactation, preparing the sow for the next cycle.

#### Sales specification

Product Properties	Declared value	Min	Max
Total Nitrogen (N)	15.5%	15.1%	
Total Calcium (Ca)	19%	18.8%	
Ca(NO <sub>3</sub> ) <sub>2</sub>	77.5 %		
NH <sub>4</sub> NO <sub>3</sub>	6.29%		8.57%
NO <sub>3</sub>	63.6%		
pН	6.5	5.7	7.3
Water insoluble >3µm	0.035%		0.05%
Particle form	Prills		
Granulometry (ISO)			
>2,0mm			17%
1,0-2,0mm		78%	
<1,0mm			5%
Bulk density kg/m <sup>3</sup>	1100 +/- 60		



#### Quality check references

Calcium (Ca) extraction	Comparable with Regulation (EC) No 2003/2003 method 8.1
Calcium (Ca) determination	Comparable with Directive 71/250/EEC method 3
Nitrogen (N)	Comparable with EU 2003/2003 N-Total-EU 2.2
рН	10% solution, in water
Moisture (mechanical free water)	Karl Fischer method

#### Undesirable substances

Undesirable substances	Standard specification	BOLIFOR <sup>®</sup> MAP	Method of analysis
Fluorine (F)	Max. 2 g/kg	< 0.15 g/kg	Dest. and ISE
Arsenic (As)	Max.10 mg/kg	< 2 mg/kg	ICP-MS
Cadmium (Cd)	Max. 10 mg/kg	< 2 mg/kg	ICP-MS
Lead (Pb)	Max. 15 mg/kg	< 10 mg/kg	ICP-MS
Mercury (Hg)	Max. 0.1 mg/kg	< 0.1 mg/kg	CV-AFS
Dioxins (PCDD/F(BEQ))	Max. 0.75 ng/kg	< 0.75 ng/kg	EC reg 589/2014 and 709/2014
Dioxins + dioxin-like PCBs (PCDD/F and dl PCBs(BEQ))	Max. 1.0 ng/kg	< 1.0 ng/kg	EC reg 589/2014 and 709/2014

\*Method of Test: Method 3.2 – EC Regulation No: 2003/2003/EC.

#### Direction for use

BOLIFOR<sup>®</sup> CNF is recommended to improve the reproductive performance of gestating and lactating sows. It is recommended not to exceed 1% inclusion rate. Consultation with an animal nutritionist for adjusting the dose prior to utilization is recommended.

#### 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) 68/2013.

Packaging available in 25, 600 and 1200 kg bags and bulk.

#### Handling and storage

BOLIFOR<sup>®</sup> CNF should be stored indoors protected from sun light in a dry and cool place in properly sealed packaging. When handled and stored according to instructions the shelf life is 3 years from date of production

#### Transport and transport regulation

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

### Legal Notice

Yara Animal Nutrition www.yara.com/animal-nutrition animal.nutrition@yara.com



Our production network is certified according to Good Manufacturing Practice - GMP+

The information above is intended to serve as guidelines and does not constitute a guarantee. We reserve the right to make changes. Valid from 2021-04-01.

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