



Knowledge grows

KYNOFOS 18 GRANDÉ

Dicalcium Phosphate, Dihydrate, Feed Grade (V3255)

Sales specification

Product Properties	Typical Analysis
Total Phosphorus (P)	18.5%
Citric acid soluble P (as % of total P)	96%
Calcium	23%
Magnesium	1.5%
Free Moisture	5.5%
pH	5.5 - 6.5

Physical Properties	
Appearance	Light grey/off white granules
Particle sizes	85 % < 0.5 mm
Bulk Density (untamped)	920 - 980 kg/m ³
Chemical solubility and biological availability	Very good

Undesirable Elements	EU Standards	KYNOFOS 18 GRANDÉ values
Fluorine (F)	Max 0.2%	Max 0.18%
Arsenic (As)	Max 10 mg/kg	Max 10 mg/kg
Cadmium (Cd)	Max 10 mg/kg	Max 8 mg/kg
Lead (Pb)	Max 15 mg/kg	Max 15 mg/kg
Mercury (Hg)	Max 0.1 mg/kg	Max 0.1 mg/kg

Identification

Chemical Formula:
Dicalcium phosphate, dihydrate ($\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$)

Synonyms:
Calcium Monohydrogen Phosphate,
Calcium Phosphate Dibasic
Dicalcium Orthophosphate

CAS No. 7789-77-7
EINECS No. 231-826-1

Description

KYNOFOS 18 GRANDÉ is a feed grade dicalcium phosphate dihydrate. KYNOFOS 18 GRANDÉ is produced by reacting defluorinated phosphoric acid (H_3PO_4) with slaked lime ($\text{Ca}(\text{OH})_2$) to produce a dicalcium phosphate dihydrate ($\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$).

Only high quality defluorinated phosphoric acid based on the high quality phosphate ore found in South Africa is used in the production of KYNOFOS 18 GRANDÉ. This together with the good quality slaked lime used in the closely controlled manufacturing process ensures a high bioavailability and a minimum of undesirable elements below those stipulated by the EU.

KYNOFOS 18 GRANDÉ is a granular, low dust, free



flowing product. The product is soluble in diluted acids.

Nutritive value

KYNOFOS 18 GRANDÉ is a high quality pure dicalcium phosphate dihydrate. The dihydrous form makes the product more biological available than anhydrous products. The structured physical form makes the product less dusty and easier to handle. KYNOFOS 18 GRANDÉ has low levels of undesirable elements.

Recommended use / application

KYNOFOS 18 GRANDÉ is widely used as a versatile P-supplement for all types of feeds. The product is recommended for use in concentrate, compound feeds, mineral feeds and free-choice supplements for ruminants, monogastrics and aquatic species.

Quality check references

Total Phosphorus	AOAC Official Method of Analysis, 1990, 15th Ed. AOAC Method 957.02 B9e.
Phosphorus solubility: In 2% citric acid	Methods of the Fertilizer Chemists' Liaison Committee, South Africa Method No. Fd-03: 1991 AOAC 958.01, or 969.02C or 962.02C. (Directive 77/535/EEC, method 3.1.3)
In alkaline ammonium citrate	Petermann method: 65°C (Directive 77/535/EEC, method 3.1.5)
Total calcium	AOAC Official Methods of Analysis, 15th Ed. 945.03 Ca (Acid-Soluble) in Fertilizers Titrimetric Method I Final Action
pH	1 % solution
Moisture (free moisture)	(AOAC) Official Methods of Analysis, 1990, 15th Ed. 965.08 Vacuum-Desiccation Methods First Action 1965 – Final Action 1974.
Undesirable elements	AOAC Official Methods of Analysis, 15th Ed., Cd, 974.27, As, 957.22.

Classification, labelling and packaging

KYNOFOS 18 GRANDÉ is available in 50 kg woven polypropylene (WPP) bags with a polyethylene inner liner.

Handling and storage

KYNOFOS 18 GRANDÉ must be stored under cover in a dry place to ensure a shelf life of at least 3 years.

Transport and transport regulations

KYNOFOS 18 GRANDÉ is non toxic and not classified as hazardous under transport regulations.

Detailed Safety Data Sheets are available on request from local agents or the manufacturer.

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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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