



Chemical Name : **Dicalcium Phosphate**  
 Chemical Formula : **CaHPO<sub>4</sub>·2H<sub>2</sub>O**  
 CAS No : 7789-77-7  
 EINECS No : 231-826-1

## Chemical Specifications<sup>(1)</sup>

## Typical Analysis

## Method of Analysis

Total Phosphorus (P), %	19 ± 0,3%	Spectrometric (71/393/EEC)
<i>Relative solubility of P</i>		
% in Ammonium citrate (Petermann)	97	(77/535/EEC 3.1.4)
% in Citric acid 2%	98	(77/535/EEC 3.1.3)
Calcium (Ca), %	25-28	(71/250/EEC)
Ca/P	1.37	
pH (1% solution in water)	7.2	potentiometry
Humidity, (free water) %	3.0	(71/393/EEC)

## Undesirable Elements<sup>(1, 2)</sup>

Fluorine (F), %	0.10	ion specific electrode
Lead (Pb), mg/kg	8	atomic absorption (flame)
Cadmium (Cd), mg/kg	7	atomic absorption (flame)
Arsenic (As), mg/kg	5	atomic absorption (hydride)
Mercury (Hg), mg/kg	0.05	atomic absorption (without flame)
Dioxins, ng/kg	<0.2	WHO-PCDD/F-TEQ
Dioxins and dioxin-like PCBs, ng/kg	<0.3	WHO-PCDD/F-TEQ

## Physical Parameters

<i>Apparent density</i>		
loose, kg/dm <sup>3</sup>	0.70	gravimetry
tapped, kg/dm <sup>3</sup>	1.00	gravimetry
<i>Particle size, mm</i>		
M	0.2<90% < 1.2	granulometry (sieve analysis)
G	0.5<90%<1.8	granulometry (sieve analysis)
P	90%<0.5	granulometry (sieve analysis)

(1) Analysis available on request. In accordance with European directive 1998/67/EC

(2) Conform to current EC legislation, Directives 2002/32/EC, 2003/57/EC, 2003/100/EC, 2005/87/EC, 2006/13/EC and 2008/76/EC, and Regulation 183/2005  
 Origin:EU

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## Production Method

**Nutriphos® Dical** is produced through the process originally pioneered by Nutrix Group. This process obtained by reaction of a lime/calcium carbonate mixture with purified phosphoric acid. The resulting product, dihydrated crystalline dicalcium phosphate, guarantees a high degree of purity together with a low level of undesirable elements.

## Packaging Labeling and Storage

**Nutriphos® Dical** is available in bulk, 1000 Kg big bags or 25 Kg bags and either transported by truck, by rail or by ship. All products are labelled conform to Directive 96/25/EC and 98/67/EC and identified by means of a lotnumber in order that trace ability is guaranteed conform to the Feed Hygiene legislation 183/2005/EC. Properly stored in a dry and cool place it is recommended to use **Nutriphos® Dical** within 2 years of manufacture.

## Use of Nutriphos® Dical

**Nutriphos® Dical** is the most widely used feed phosphate within Europe and is viewed as the benchmark for all other phosphates in view of purity and digestibility. **Nutriphos® Dical** has a powdered structure and is free flowing which makes that it blends easily with other feed materials. Its calcium to phosphorus ration of 1.3:1 is close to the optimum ratio in standard feeds and the neutral pH contributes to the buffering capacity. It can, therefore, be used in a wide range of feeds. **Nutriphos® Dical** is non hygroscopic, is very easy to handle and will not cause dust during handling.

## Why Nutriphos® Dical?

**Nutriphos® Dical** is the only real dihydrated crystalline dicalcium phosphate available on the market. **Nutriphos® Dical** is the benchmark to which other phosphates are related in view of purity and digestibility.

## Recommendations

The product should be stored in a dry place.  
Technical specifications guaranteed at the time that the product leaves the factory.  
Not classified as dangerous substance in accordance with current transportation norms.

### UNDESIRABLE ELEMENTS

### EU STANDARDS

Fluorine (F)	0,2%	max
Arsenic (As)	10 mg/kg	max
Cadmium (Cd)	10 mg/kg	max
Lead (Pb)	15 mg/kg	max
Mercury (Hg)	0,1mg/kg	max

While every care has been taken to ensure that the information given in this datasheet is correct at the time of publication, the company cannot give any absolute guarantee as to its accuracy or accept any liability resulting from its use.

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