

Mineral Fact Sheet

Dicalcium phosphate dihydrate	
Formula:	CaHPO ₄ x 2 H ₂ O
CAS No.:	7789-77-7
EC No.:	231-826-1
Feed Materials Catalogue:	11.3.1
Manufacturing Process:	
<p>The most common production process used for obtaining dicalcium phosphate dihydrate is dissolving either rock phosphate or bones in hydrochloric acid, purification and precipitation in crystals. Under very precise and controlled process parameters dicalcium phosphate dihydrate can also be produced from purified feed grade phosphoric acid with a calcium source. The grade of hydration can be checked by means of X-ray diffraction analysis or by the thermo-gravimetric method.</p>	
Characteristics:	
Total phosphorus	17 - 18%
Soluble phosphorus	95% in 2% citric acid
	95% in alkaline ammonium citrate
Calcium	23 - 25%
Ca : P ratio	1.3 : 1
pH (1% solution)	5 - 7.5
Ash insoluble in HCl	0,4 - 1,4 %
Moisture	1% - 2%
Appearance	white fine powder
Apparent density	0.6 - 0.9 kg/l loose
	0.9 - 1.1 kg/l tapped
Handling, storage, toxicity:	
avoid dust formation	
store in dry place	
non toxic	
Specific information:	
Chemically neutral, free flowing, non hygroscopic, Ca : P ratio optimal in standard feed	