

# DI-TAB<sup>®</sup>

## (Dicalcium Phosphate Dihydrate, Unmilled)

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### PRODUCT DATA SHEET

IDENTIFICATION

CAS Number [7789-77-7]

SYNONYM

Dibasic Calcium Phosphate Dihydrate  
Phosphoric acid, calcium salt (1:1)  
Calcium Phosphate, Dihydrate (1:1)  
Calcium Hydrogen Phosphate Dihydrate  
Calcii hydrogenophosphas dihydricus

EMPIRICAL FORMULA

$\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$

MOLECULAR WEIGHT

$M_r = 172.1$

PHYSICO-CHEMICAL PROPERTIES

White, odorless and tasteless granules. Practically insoluble in cold water and in ethanol (96 per cent). It dissolves in dilute hydrochloric acid and in dilute nitric acid.

APPLICATIONS

Used as an excipient in the manufacture of medicinal and nutraceutical products and as a bioavailable source of calcium and phosphorus in nutritional supplements.

SPECIFICATIONS

The specifications below are the harmonized specifications in force in the European Union, the USA and Japan. As there are some small differences in the harmonized specifications, our sales specifications are based on the most restrictive ones.

Specification Items	Limits	Comment (non harmonized attributes)
Identification A	White precipitate forms	Passes test
Identification B	Yellow precipitate forms	Passes test
Assay (as $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$ )	98.0 – 105.0%	
Loss on Ignition	24.5 – 26.5%	
Chlorides	0.248 % max	
Fluorides	50 ppm max	Ph.Eur. limit is 100 ppm max
Sulfates	0.48 % max	
Arsenic	2 ppm ( $\mu\text{g/g}$ ) max	Ph.Eur. limit is 10 ppm max
Lead	0.25 ppm max	Not in USP nor in Ph.Eur.
Heavy Metals (as Pb)	0.003% max (30 ppm)	Ph.Eur. limit is 40 ppm max
Carbonates	No effervescence	Passes test
Barium	No turbidity in 10 mins.	Passes test
Acid-insoluble substances	0.2% max ( $\leq 10$ mg)	
Iron	400 ppm max	Not a USP requirement
Particle size: On 20#(850 $\mu\text{m}$ )	1 % max	Not a compendial specification
On 40 # (425 $\mu\text{m}$ )	2 % max	Not a compendial specification
On 100 # (150 $\mu\text{m}$ )	40 - 80%	Not a compendial specification
Through 325 # (45 $\mu\text{m}$ )	5 % max	Not a compendial specification

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### (Dicalcium Phosphate Dihydrate, Unmilled)

#### TYPICAL PROPERTIES

pH (20 % slurry)	7.5
Bulk Density	0.95 g/ml (59 lbs/ft <sup>3</sup> )
Calcium content (as is)	23.3 %
Phosphorus content	18.1 %
Particle size: On 20 # (850 µm)	0 %
On 100 # (150 µm)	72 %
Through 325 # (45 µm)	3 %

#### REGULATORY / QUALITY

This product meets the requirements of the USP/EP/JP/FCC compendial specifications, current edition.

##### Microbiological Limits:

Total Aerobic Microbial Count (TAMC): 2000 CFU/GM

Total Combined Yeast/Mold Count (TYMC): 200 CFU/GM

INS: 341 (ii). This product complies with current European regulation Directive 2008/84/EC.

The following declarations can be downloaded on

<http://www.innophos.com/certs.asp>

Allergen:	Free of Allergens
GMO	Free of Genetically Modified Organisms
Halal	Product Conforms to Halal Standards
ISO	ISO-9001: 2000 (NSH-ISR)
Kosher	Product Conforms to Kosher Standards
NAFTA	Product Qualifies for the North-American Free Trade Agreement

BSE/TSE No materials of animal origin are used

Residual Solvents The product is free of Residual Solvents

#### PACKAGING

25 kg net weight paper bags – Resource Code 20057743BK2  
55 kg net weight fiber drums – Resource Code 20057743FK5

#### TRANSPORT

• INLAND International Legislation (RID-ADR)	Not regulated
• SEA FREIGHT (OMI)	
• AIR FREIGHT (IATA)	

#### STORAGE CONDITIONS

Store at room temperature.

Re-test date: 12 months after the date of manufacture

#### SAFETY INSTRUCTIONS

Please consult the material safety data sheet, downloadable on <http://www.innophos.com>

#### Manufacturing Site

Chicago Heights, IL.

#### Shipping Location

Chicago, IL.