

# Dicalcium Phosphate



Dicalcium Phosphate is an effective flowing agent that will contribute nutrients to your formula. It is a product that consumers are familiar with and makes the perfect addition to your tablet.

A crystalline, white/off-white, odorless powder, Dicalcium Phosphate is also free flowing, which will ensure that ingredients run through machinery with ease; additionally this means that the final product will have consistent ingredients throughout and each tablet will be the same.

Highly soluble in citric acid and ammonium citrate, Dicalcium Phosphate has a pH level of 6.5 to 7. Due to its alkalinity, Dicalcium Phosphate will not work with some acidic active ingredients. The binding properties of Dicalcium Phosphate are also moderate, and it will need to be used alongside other excipients.

Added to many foods as a supplement to aid the well-being of both humans and animals, Dicalcium Phosphate has many different uses and is a beneficial excipient to have in your tableting formulation.

## Main Benefits of Dicalcium Phosphate

- **Various Formulation Functions** - Dicalcium Phosphate is directly compressible, improves flowability, and can be used as an anti-caking agent.
- **Has Nutritional Uses** - This excipient easily travels through the digestive system and is a dietary supplement on its own. It is often included in breakfast cereals, flour, and noodle products.
- **Kosher and Halal** - LFA's Dicalcium Phosphate is certified kosher and halal. Dicalcium Phosphate is also GRAS (Generally Recognized As Safe) by the FDA.

## Specifications

CAS number	7757-93-9 or 7789-77-7 (dihydrate)
Molecular formula	$\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$
Appearance	White granular powder
Physical state	Solid
Storage	Store at room temperature
Melting point	Decomposes
Density	2.929 g/cm <sup>3</sup> (anhydrous) 2.31 g/cm <sup>3</sup> (dihydrate)
Bulk density	1.28 g/cm <sup>3</sup>
Molecular weight	136.06 g/mol (anhydrous) 172.09 g/mol (dihydrate)