



**APIFAC**

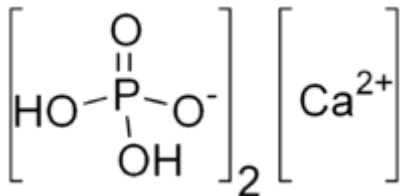
# APIFAC

Mono Acid Calcium Phosphate

## MONO ACID CALCIUM PHOSPHATE

Used as an acidulant in baking powders and in wheat flours; mineral supplement for foods and feeds and in enameling Buffer, dough conditioner, firming agent, leavening agent, nutrient, yeast food, sequestrant.

- Chemical Name: Calcium-bis-dihydrogen-orthophosphate Monohydrate
- E Number: E341
- Empirical Formula:  $\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O}$
- Molecular Weight: 252
- Structural Formula:



**MODE OF ACTION:** Mono Acid Calcium Phosphate or MCP as it is commonly known is extensively used by biscuit manufacturers world over for its proven technical and nutritional advantages.

On addition to the dough, MCP reacts with alkaline medium such as soda and releases a part of carbon di oxide gas which, while escaping gives a raised or spongy feeling to the dough. Some part of the gas is also released in an even manner during the baking process itself thereby raising the product and making it light and fluffy. Calcium and phosphates that remain as residues provide important nutritional value to the final product since they help in the growth and strengthening of bones in the human body.

MCP is superior to sodium aluminium sulphate or alum as it leaves no undesirable metallic after taste after consumption. The use of MCP is imperative in non sweet biscuits, wafers and ice cream cones as the dough will be well raised and made spongy by its addition.

**FOOD USE:** Baked goods/ Baking powder/ Dough conditioner/ Dry powder beverages/  
Fruits/ Puddings/ Yoghurts.

### **Recommended Additive Concentrations**

- Sweet Biscuits : 0.2 – 0.3% of total dry dough weight
- Salty Biscuits : 0.2 – 0.35% of total dry dough weight
- Cones, Wafers, etc. : 0.2 – 0.3% of total dry dough weight