YUNBO 云波健康

CALCIUM LACTATE

General Characteristics:

- **Formula:**$(CH_3CHOHCOO)_2Ca\cdot 5H_2O$
- **Molecular weight:** 308.29
- **Appearance:** Calcium Lactate occurs as a white to cream-colored, crystalline powder or granules.
- **Odor:** Odorless， slightly bitter.
- **CAS Number:** [814-80-2]
- **EINECS No:** 212-406-7

Uses:

- Calcium lactic acid calcium supplementation can promote the calcification of bone and teeth, maintain the normal excitability of nerve and muscle and reduce the permeability of capillaries.
- Puffing and buffering agents for bread baking powder.
- It can also be used as calcium fortifier, as well as bread, pastry, noodle food, milk powder, tofu, pickled products.

Packing and Storage:

- 25kg net paper bag with PE bag inner.
- Store in dry, well ventilated warehouse and keep away from direct sunlight.
- Shelf life--- two years

GMO-Status:

- The product is a non GMO product and is free from any recombinant DNA.

Irradiation/Radioactivity：

- Yunbo’s Calcium pyrophosphate was never subjected to any kind of ionized irradiation and contains no radioactivity not even in minor amounts.

YUNBO 云波健康

❖ BSE/TSE：

➢ No raw materials from bovine origin are used nor are any bovine constituents present in the product.

❖ Product test data：

➢ Assay— Accurately weigh about 500 mg, previously dried at 120 for 4 hours, transfer to a suitable container, and dissolve in 150 mL of water containing 2 mL of diluted hydrochloric acid. Add 15 mL of sodium hydroxide TS and 300 mg of hydroxy naphthol blue indicator, and titrate with 0.05 M edetate disodium VS until the solution is deep blue. Each mL of 0.05 M edetate disodium is equivalent to 10.91 mg of $C_6H_{10}CaO_6$. Not less than 98% is found.

➢ Loss on drying 731— Dry it at 120 for 4 hours: it loses between 25.0% and 30.0% of its weight.

➢ Acidity— Add phenolphthalein TS to 20 mL of a 1 in 20 solution, and titrate with 0.10 N sodium hydroxide: not more than 0.50 mL is required to produce a pink color.

➢ Heavy metals (Reagent test)— Dissolve 1 g in 2.5 mL of diluted hydrochloric acid, dilute with water to 40 mL, and add 10 mL of hydrogen sulfide TS: any brown color produced is not darker than that of a control containing 0.02 mg of added Pb (0.002%).

➢ Magnesium and alkali salts— Mix 1 g with 40 mL of water, carefully add 5 mL of hydrochloric acid, heat the solution, boil for 1 minute, and add rapidly 40 mL of oxalic acid TS. Add immediately to the warm mixture 2 drops of methyl red TS, then add ammonia TS dropwise, from a buret, until the mixture is just alkaline. Cool to room temperature, transfer to a 100-mL graduated cylinder, dilute with water to 100 mL, mix, and allow to stand for 4 hours or overnight. Filter, and transfer to a platinum dish 50 mL of the clear filtrate, to which has been added 0.5 mL of sulfuric acid. Evaporate the mixture on a steam bath to a small bulk. Carefully heat over a free flame to dryness, and continue heating to complete decomposition and volatilization of ammonium salts. Finally ignite the residue at 800 ± 25for 15 minutes: the residue weighs not more than 5 mg (1%).

- Volatile fatty acid— Stir about 500 mg with 1 mL of sulfuric acid, and warm: the mixture does not emit an odor of volatile fatty acid.

- Is somewhat efflorescent and at 120C becomes anhydrous. One g dissolves in 20 mL of water; practically insoluble in alcohol. Store it in tight containers.

❖ Specifications: （USP）

Test parameter	Specification
Assay	Not less than 98.0% and not more than 101.0% of C6H10CaO6, calculated on the dried basis.
Acidity	Passes test (about 0.45%, as lactic acid)
Fluoride	Not more than 0.0015%.
lead	Not more than 2 mg/kg
Loss on Drying	Pentahydrate: Between 22.0% and
	27.0%; Trihydrate: Between 15.0% and 20.0%; Monohydrate: Between 5.0% and 8.0%; Dried Form: Not more than 3.0%.
Magnesium and Alkali Salts	Not more than 1%.