

Other name	Natural Calcium Propionate , glucose cultures .	product code: LVK-CP-Micro™
Description	An organic calcium salt of propionic acid along with other organic acid (such as acetic acid) as food preservative, which is produced by fermentation with a selected strain of a propionibacterium. Is effective inhibitor of the growth of certain moulds and some bacteria	
Usage	The recommended dosage is 0.10% - 0.75 % , but it could be optimized in the different material (flour) or production process.	

COMPOSITION

Description	% ^[1]
As calcium propionate (%) ^[1]	> 50
Others organic acid salts	< 40

^[1] Standardized content ratio: In this product the Calcium propionate percentage is provided by detecting total propionic acid by acidulation with HPLC assay method. Details of test methods can be supplied on request.

BACTERIOLOGICAL SPECIFICATION

Aerobic Bacteria count (cfu/g(ml))	50,000 max
Coliform Bacteria (MPN/G)	None Detected
Enterobacteria E coli(MPN/G)	None Detected
Salmonella(MPN/25G)	None Detected
S. aureus (25g (ml))	None Detected
Molds and Yeasts	<100 CFU/g

CHEMICAL SPECIFICATION

Moisture (%)	≤15
Ash (%)	≤40
Heavy metals	< 10 ppm (as Pb)
Arsenic(mg/kg)	3 max
Lead(mg/kg)	5 max
Cadmium(mg/kg)	5 max
Mercury	10 max

SENSORY INFORMATION

Appearance (Color) ^[2]	Yellowish powder or agglomerate
Particle size distribution	90 % between 63 – 224 µm
Odour	N/A

^[2] Appearance color may vary from batch to batch and color intensity is not an indication of Calcium propionate concentration

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Profood International, Inc. 600 Industrial Dr., Suite 201, Naperville, IL 60563

☎: +1-888-288-0081; 630-428-2386 ☎: +630-527-9905 ✉: support@profoodinternational.com

ALLERGEN INFORMATION

Component	Presence
	As an ingredient In the recipe
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) and products thereof	NO
Crustaceans and products thereof	NO
Eggs and products thereof	NO
Fish and products thereof	NO
Peanuts and products thereof	NO
Soybeans and products thereof	NO
Milk and products thereof (incl. Lactose)	NO
Nuts i.e. almonds (<i>Amygdalus communis</i> L.), hazelnuts (<i>Corylus avellana</i>), walnuts (<i>Juglans regia</i>), cashews (<i>Anacardium occidentale</i>), pecan nuts (<i>Carya illinoensis</i> (Wangenh.) K. Koch), Brazil nuts (<i>Bertholletia excelsa</i>), pistachio nuts (<i>Pistacia vera</i>), macadamia nuts and Queensland nuts (<i>Macadamia ternifolia</i>), and products thereof	NO
Celery and products thereof	NO
Mustard and products thereof	NO
Sesame Seeds and products thereof	NO
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO ₂	NO
Lupin and products thereof	NO
Molluscs and products thereof	NO

ALLERGIC REACTIONS

While safe for consumption by the public, calcium propionate may cause a reaction if you are allergic or hypersensitive to the compound. Children may be affected by preservatives in foods, according to a study published in the August 2002 issue of the "Journal of Pediatrics and Child Health." The study concluded that some children have a behavioral toxicity to food preservatives.

PACKING

- 20kg/kraft-plastic woven bag; it is available in different types of packaging. Please contact the sales representative for more information.

STORAGE & HANDLING PRECAUTIONS

The product should be stored and handled in its original packaging or in a suitable sealed container and kept in a clean and dry place. Storage conditions should preferably be a sheltered environment with limited temperature variations and low humidity levels. Keep it away from rainwater during transportation and storage.

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Under normal conditions, the use of this product does not cause any undue health hazard. Precautions should be taken to prevent eye- and prolonged or repeated skin contact with the solid product or its solutions.

The product is better used within 18 months of the production date.

APPLICATION AREAS

Cereal food

LVK-CP Micro is widely employed in bread/cakes to prevent mould and extend the normal shelf life of the cereal food product such as bread dough, pizza dough, bread and pastries. It is easy to handle and easy to incorporate into flour.

Dairy products

LVK-CP Micro can be used for dried and condensed milk; flavored milks and yogurt drinks; ripened, unripened and processed cheeses; dairy desserts such as flavored yogurts and puddings; and dairy-based spreads.

Meat products

LVK-CP Micro can be used for processed meat (beef, poultry products; sausage casings; and preserved fish, including canned fish and shellfish

Other application

LVK-CP Micro can be used for prevention of microbial deterioration of products other than foodstuffs including alcoholic beverages such as beer, malt beverages, cider and distilled spirits with more than 15 percent alcohol as well as animal foods.

In addition, the preservative can be found in sports drinks, diet foods and beverages; commercially prepared salads such as potato salad; condiments such as vinegar and mustard; soups, sauces and dried or processed mushrooms, beans, seaweeds and nut butters.

LVK-CP Micro has advantages over other fungicides in being of low toxicity and of relatively low cost. It has been proven to be of value in pharmaceutical preparations used for the treatment of athletes' foot and rashes.

Excluded food

Foods that do not use or contain calcium propionate as a preservative, according to the World Health Organization Food Standards are:

- Milk, buttermilk, fermented mild products
- Sterilized creams, whipping cream whipped creams, reduced fat creams,
- Whey cheese, whey protein cheese, dried whey products and butter.
- Fresh fruit, fruit juice, vegetable juice and fresh vegetables .
- Whole grains or rice, fresh pasta, fresh meat, poultry, game meats, fresh fish, liquid egg products, frozen egg products, sugar, honey, syrups, salt, herbs, spices, coffee, grape wines and infant formulas.

DIRECTIONS FOR USE

Since there are many factors affecting the mould growth rate on bread/cake, the levels of used **LVK-CP Micro** cannot be correlated precisely with the extension of the shelf life.

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In general, however, for standard bread recipes, a concentration of 0.10-0.25% **LVK-CP Micro** on the mass of flour is recommended. Although the odour of **LVK-CP Micro** at this concentration may be noticed when the bread is still hot, it rapidly disappears during cooling.

At the start of dough making **LVK-CP Micro** should be added to the other dry ingredients of the loaf while forbid using with sodium bicarbonate at the same time. A small reduction in volume of the finished loaf may result from the use of **LVK-CP Micro** but this can usually be overcome by the addition of some extra yeast. **LVK-CP Micro** can also be added at the end of the dough making.

In all cases it is advisable to carry out an initial baking test, so that the precise effects on odour, flavour and bread volume can be determined.

MANUFACTURER QUALITY CERTIFICATES

ISO22000-2005 & ISO 9001- 2008 Certificates

Kosher and Halal certificates are available from the Customer Center or sales representative.

The product is accepted by most countries for use in food. However, as legislation regarding its use in food may vary from country to country, local food regulations should always be consulted concerning the status of this product. Advice regarding the legal status of this product may be obtained on request.

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