

VITALBAKERY FAP 125.000

VITALBAKERY FAP 125.000 is a highly concentrated Fungal Alpha-Amylase from a selected strain of *Aspergillus oryzae* produced through fermentation.

PRODUCT CHARACTERISTICS

| | |
|-----------------|----------------------|
| Enzyme | Fungal Alpha-Amylase |
| Activity | 125.000 u / g |
| Color | Light brown* |
| Form | Granulate Powder |

* Color can vary from batch to batch. Color intensity is not an indication of enzyme activity.

PRODUCT SPECIFICATION

| | Unit | Specified |
|-----------------------------|---------|-----------|
| Fungal Alpha-Amylase | u / g | 125.000 |
| Total plate count | Cfu / g | <50.000 |
| Coliforms | MPN / g | <30 |
| E. Coli | / 25 g | Negative |
| Salmonella | / 25 g | Negative |
| Heavy metals | mg / kg | <30 |
| Lead | mg / kg | <5 |
| Arsenic | mg / kg | <3 |
| Cadmium | mg / kg | <0,5 |
| Mercury | mg / kg | <0,5 |

NUTRIENT DATA

| | Unit | Value |
|----------------------------|------|-------|
| Energy | Kcal | 374 |
| | KJ | 1.566 |
| Proteins | g | 25 |
| Total carbohydrates | g | 70 |
| Sugars | g | 0 |
| Starch | g | 0 |
| Polyols | g | 0 |
| Total fat | g | <1 |
| Saturates | g | 0 |
| Mono-unsaturates | g | 0 |
| Polyunsaturates | g | 0 |
| Fiber | g | 0 |
| Sodium | mg | 0 |

ALLERGEN TABLE

| Yes | No | Allergens |
|-----|----|---|
| | • | Cereals containing gluten |
| | • | Crustaceans |
| | • | Eggs |
| | • | Fish |
| | • | Peanuts |
| | • | Soybeans |
| | • | Milk (incl. lactose) |
| | • | Nuts |
| | • | Celery |
| | • | Mustard |
| | • | Sesame seeds |
| | • | Sulphur dioxide and sulphites (>10 mg/kg) |
| | • | Lupin |
| | • | Molluscs |

European Community EC Directive 2007/68 / EC amending Directive 2000/13 EC as regards indication of the ingredients present in foodstuffs, in particular allergens, and Annex III a.

STORAGE CONDITION AND SHELF LIFE

At room temperature under 25 °C, enzyme activity remains more than 95% after 12 months of the production date.

PACKAGING

20 Kg box.

FOOD SAFETY

VITALBAKERY FAP 125.000 is produced according HACCP plan in a process controlled by ISO9001:2008 quality system.

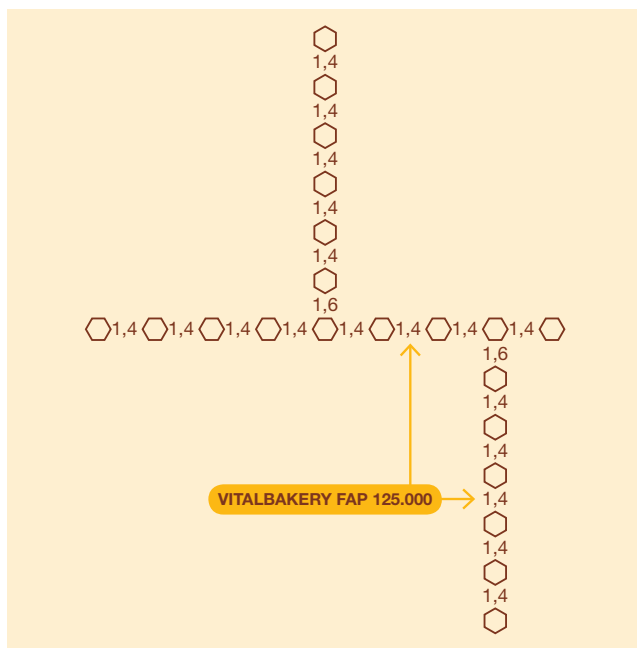
VITALBAKERY FAP 125.000 complies with JECFA and FCC requirements.

SAFETY AND PRECAUTION

Enzymes are proteins. Inhalations of dust may induce sensitisation and cause allergic reactions in susceptible individuals. Prolonged contact with enzymes may irritate the skin, eyes, and mucous membranes. See the MSDS for further information regarding safe handling of the product and spills.

ALPHA-AMYLASE IN BAKING PROCESS

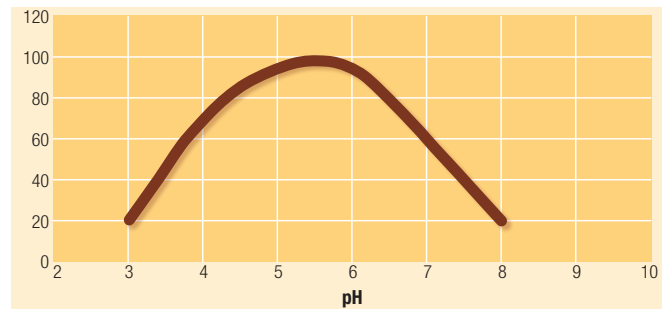
VITALBAKERY FAP 125.000 is a highly concentrated Fungal Alpha-Amylase from a selected strain of *Aspergillus oryzae* produced through fermentation. This enzyme hydrolyses the endo α (1 - 4) glycosidic bonds of starch chain and generates maltose and minor maltotriose, glucose and other oligosaccharides. It is food grade enzyme typically used as a flour improver to enhance crumb structure and baking volume.



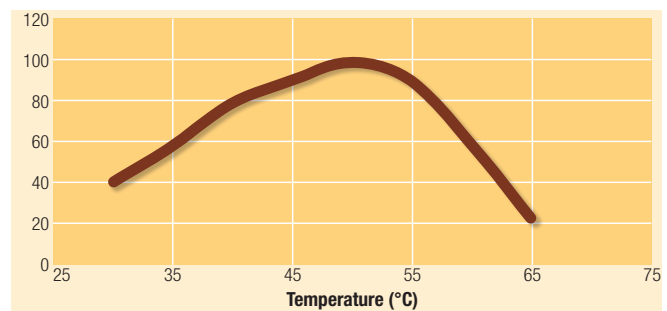
FUNCTION CONDITIONS

Working at pH 4,0 - 6,6, optimum 4,8 - 5,5; working temperature 45 - 65 °C, favourable at 45 - 55 °C.

Activity (%)



Activity (%)



BENEFITS OF VITALBAKERY FAP 125.000

- Increase loaf volume
- Increase fermentable sugar for yeast
- Ensure a fine and uniform crumb structure
- Improve crust color
- Increase bread softness
- Improved bread elasticity
- Flour corrected activity

VITALBAKERY FAP 125.000 is an alpha-amylase obtained from the newest biotechnology. It's a high performance enzyme that brings versatility and efficiency to all bread process. VITALBAKERY FAP 125.000 gives a high quality to baked goods increasing bread volume, ensuring a fine and uniform crumb structure and improving the colour crust.

DOSAGE GUIDELINE

2 - 12 ppm of VITALBAKERY FAP 125.000; the optimum dosage depends of the quality of flour and different bread process. It must be determinate by applications trials.

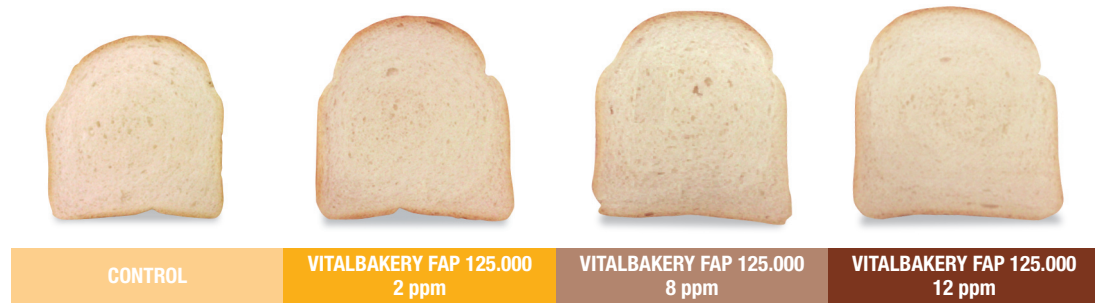
SINERGY BETWEEN ENZYMES

The good results of bakery products increase when are used together VITALBAKERY FAP 125.000 with VITALBAKERY GOP 10.000 (glucose oxidase), VITALBAKERY LSP (lipase) and VITALBAKERY XSP 10.000 (xylanase).

TIN BREAD OPEN TOP

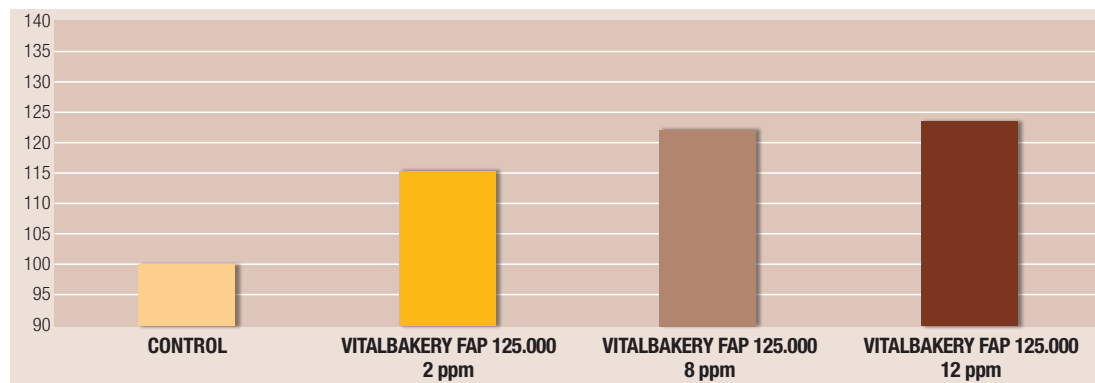
Process of tin bread open top with flour (W300) and other typical ingredients like water, salt, sugar, oil and yeast.

Evaluate volume and appearance of addition VITALBAKERY FAP 125.000 in 2, 8 and 12 ppm on flour.



The next picture shows that VITALBAKERY FAP 125.000 increase volume and crust colour of tin bread open tops.

Index of specific volumen (%)



All trials contain ascorbic acid and VITALBAKERY FAP 125.000.

