

PRODUCT DESCRIPTION - PD 40211-8.2EN

GRINDAMYL® MAX-LIFE E12

Bakery Enzyme

Description

GRINDAMYL® MAX-LIFE E12 is an amylolytic enzyme complex produced by fermentation with selected fungal and bacterial strains.

Application areas

Bread and bakery products.

Potential benefits

- Improves softness of bread
- Extends shelf life of bread

Usage levels

Based on flour weight corresponding to 100-200 ppm
10-20 g/100 kg

However, as different flours and procedures have different needs, tests should be carried out to find the optimum dosage.

Directions for use

GRINDAMYL® MAX-LIFE E12 is mixed into flour, premixes or bread improvers together with other dry ingredients.

Composition

GRINDAMYL® MAX-LIFE E12 is composed of:

- Sodium chloride
- Wheat starch
- Protein
- Maltodextrine
- Palm olein
- Trisodium citrate

Physical/chemical specifications

Physical form	dust-reduced microgranulate
Colour*	off-white
Enzyme activity	min. 212 FAU/g

*Colour may vary from batch to batch.

Microbiological specifications

Total viable count	less than 50000 /gram
Coliforms	less than 30 /gram
E. coli	absent in 25 grams
Salmonella species	absent in 25 grams
Mycotoxins*	negative by test
Antibiotic activity	negative by test

* Aflatoxin B1, ochratoxin A, sterigmatocystin, T-2 toxin, zearalenone

Heavy metal specifications

Arsenic	less than 3 mg/kg
Lead	less than 5 mg/kg
Heavy metals (as Pb)	less than 30 mg/kg

Nutritional data

Calculated values per 100 g	
Energy	160/672 kcal/kJ
Protein	2-6 g
Carbohydrates	30-36 g
Fat	less than 1 g
Sodium chloride	50-60 g
Moisture	5-9 g
Ash	52-62 g

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Storage

GRINDAMYL® MAX-LIFE E12 should be stored dry and cool (max. 25°C/77°F).

The shelf life of GRINDAMYL® MAX-LIFE E12 is 24 months when stored as recommended in unbroken packaging.

Packaging

Cartons of 25 kg net.

Purity and legal status

GRINDAMYL® MAX-LIFE E12 meets the specifications laid down by the Joint FAO/WHO Expert Committee on Food Additives and the Food Chemicals Codex.

GRINDAMYL® MAX-LIFE E12 is approved 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.

Safety and handling

Avoid unnecessary contact with enzyme preparations during handling. In case of spillage, rinse with water. Additional information can be found in the Material Safety Data Sheet.

GMO status

The microorganisms used for production of GRINDAMYL® MAX-LIFE E12 are developed by traditional non-GMM technique.

Allergens

The table below indicates the presence (as added component) of the following allergens and products thereof (according to US Food Allergen and Consumer Protection act (FALCPA), 2004 and Directive 2000/13/EU as amended).

Yes	No	Allergens	Description of components
X		Wheat	
X		Other cereals containing gluten	Wheat starch Glucose (used in fermentation)* Wheat bran (used in fermentation)* Maltodextrin
	X	Crustaceans	
	X	Eggs	
	X	Fish	
	X	Peanuts	
	(X)	Soybeans	Soy hydrolysate (used in fermentation)*
	X	Milk (incl. lactose)	
	X	Nuts	
	X	Celery	
	X	Mustard	
	X	Sesame seeds	
	X	Sulphur dioxide and sulphites (>10mg/kg)	
	X	Lupin	
	X	Molluscs	

*Danisco has determined that fermentation nutrients are outside the scope of US and EU food allergen labeling requirements^{1, 2}.¹ Position paper sent by ETA to the FDA on September 12, 2005 (www.enzymetechnicalassoc.org/Allergen%20psn%20paper-2.pdf).

² Summarized in the position paper of the Association of Manufacturers and Formulators of Enzyme products: <http://www.amfep.org/documents/AmfepstatementScopeAllergyLabellingDirf>