GENENCOR DIVISION Food Enzymes foodenzymes@danisco.com www.danisco.com

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Valid from: March 31, 2011



PRODUCT DESCRIPTION - PD 40204-9.5EN

GRINDAMYL® EXEL 48

Bakery Enzyme

Description

GRINDAMYL® EXEL 48 is an enzyme complex with lipase and xylanase activities.

GRINDAMYL® EXEL 48 is produced by fermentation with selected fungal and bacterial strains.

Application areas

Yeast-raised bread.

Potential benefits

- Improves dough stability
- Increases volume of baked goods
- Improves dough handling
- Improves crumb structure

Usage levels

Based on flour weight 75-150 ppm corresponding to 7.5-15 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® EXEL 48 is mixed into flour, premixes or bread improvers together with other dry ingredients.

Composition

GRINDAMYL® EXEL 48 is composed of:

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

Physical/chemical specifications

Physical form powder Colour* off-white

*Colour may vary from batch to batch.

Microbiological specifications

Total viable count
Coliforms
E. coli
Salmonella species
Mycotoxins*
Antibiotic activity

less than 50000 /gram
less than 30 /gram
absent in 25 grams
absent in 25 grams
negative by test
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 155/651 kcal/kJ
Protein less than 5 g
Fat less than 1 g
Carbohydrates 30-40 g
Sodium chloride 50-60 g
Moisture 5-9 g
Ash 52-62 q

Storage

GRINDAMYL® EXEL 48 should be stored dry and cool (max. 25°C/77°F).

The shelf life of GRINDAMYL® EXEL 48 is 18 months when stored as recommended in unbroken packaging.

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GRINDAMYL® EXEL 48

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Packaging

Polyethylene-lined paper bags of 25 kg net.

Purity and legal status

GRINDAMYL® EXEL 48 meets the specifications laid down by the Joint FAO/WHO Expert Committee on Food Additives and the Food Chemicals Codex.

GRINDAMYL® EXEL 48 is approved by many 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® EXEL 48 are developed by recombinant DNA 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 Proctection act (FALCPA), 2004 and Directive 2000/13/EU as amended).

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