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Valid from: March 31, 2011



PRODUCT DESCRIPTION - PD 40016-14.2EN

GRINDAMYL® PR 59

Bakery Enzyme

Description

GRINDAMYL® PR 59 is a protease enzyme which hydrolyzes proteins.

GRINDAMYL® PR 59 is produced by fermentation with a selected strain of fungus.

Application areas

Bread, pizzas and fermented crackers.

Potential benefits

- Improves dough handling
- Improves dough extensibility
- Reduces mixing time
- Improves volume
- Improves texture
- · Reduces dough contraction

Usage levels

Based on flour weight,

High protein bread flour 100-300 ppm corresponding to 10-30 g/100 kg Pizza base 200-400 ppm corresponding to 20-40 g/100 kg Fermented crackers 50-200 ppm corresponding to 5-20 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® PR 59 is mixed into flour, premixes or bread improvers together with other dry ingredients.

Composition

GRINDAMYL® PR 59 is composed of:

- Wheat starch
- Protein
- Sodium chloride

Physical/chemical specifications

Physical form powder Colour* white

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

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 365/1533 kcal/kJ
Protein <5 g
Carbohydrates 85-90 g
Fat less than 1 g
Moisture 5-9 g
Ash 2-6 g
Sodium chloride 1-4 g

^{*}Colour may vary from batch to batch.

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

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Storage

GRINDAMYL® PR 59 should be stored dry and cool (max. 25°C/77°F).

The shelf life of GRINDAMYL® PR 59 is 18 months when stored as recommended in unbroken packaging.

Packaging

Polyethylene-lined paper bags of 20 kg net.

Purity and legal status

GRINDAMYL® PR 59 meets the specifications laid down by the Joint FAO/WHO Expert Committee on Food Additives and the Food Chemicals Codex.

GRINDAMYL® PR 59 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® PR 59 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 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 starch
	Х	Crustaceans	
	Х	Eggs	
	Х	Fish	
	Х	Peanuts	
	Х	Soybeans	
	Х	Milk (incl. lactose)	
	Х	Nuts	
	Х	Celery	
	Х	Mustard	
	Х	Sesame seeds	
	х	Sulphur dioxide and sulphites (>10mg/kg)	
	Х	Lupin	
	Х	Molluscs	