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

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Valid from: March 31, 2011



PRODUCT DESCRIPTION - PD 40172-12.3EN

GRINDAMYL® AG 1500/C

Bakery Enzyme

Description

GRINDAMYL® AG 1500/C is an amyloglucosidase which is produced by fermentation with a selected strain of fungus.

Application areas

Bread and bakery products.

Potential benefits

- Increases freeze stability
- · Produces fermentable sugars for yeast
- Improves softness of bread

Usage levels

Based on flour weight 30-60 ppm corresponding to 3-6 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® AG 1500/C is added to premixes or bread improvers together with other dry ingredients.

Composition

GRINDAMYL® AG 1500/C is composed of:

- · Wheat starch
- Protein

Physical/chemical specifications

Physical form powder Colour* off-white Enzyme activity min. 1275 AGU/g

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
 377/1583 kcal/kJ

 Protein
 8-13 g

 Carbohydrates
 86-92 g

 Fat
 less than 1 g

 Moisture
 5-9 g

 Ash
 3-6 g

Storage

GRINDAMYL® AG 1500/C should be stored dry and cool (max. 25°C/77°F).

The shelf life of GRINDAMYL® AG 1500/C is 12 months when stored as recommended in unbroken packaging.

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

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

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Packaging

Cartons of 25 kg net.

Purity and legal status

GRINDAMYL® AG 1500/C meets the specifications laid down by the Joint FAO/WHO Expert Committee on Food Additives and the Food Chemicals Codex.

GRINDAMYL® AG 1500/C 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® AG 1500/C 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	
	(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	

^{*}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