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

Valid from: March 31, 2011

PRODUCT DESCRIPTION - PD 40008-10.3EN

GRINDAMYL® A 5000

Bakery Enzyme

Description

GRINDAMYL® A 5000 is a fungal alpha-amylase which is produced by fermentation with a selected strain of Aspergillus oryzae.

Application areas

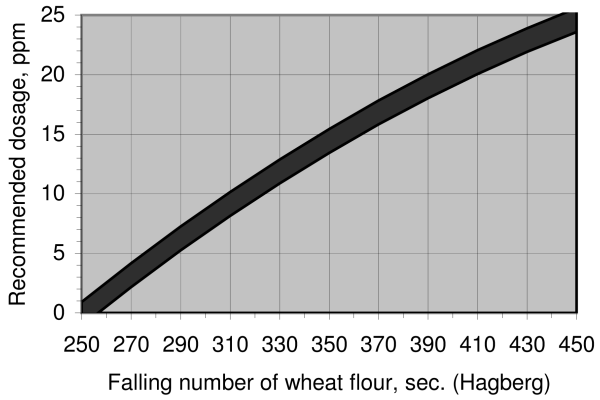
Flour, bread and bakery products.

Potential benefits

- Improves baking quality of flour
- Produces fermentable sugars for yeast
- Improves crust colour
- Improves bread quality

Usage levels

The dosage needed to adjust falling number to 250 secs can be found from the figure below.



Directions for use

GRINDAMYL® A 5000 is mixed into flour, premixes or bread improvers together with other dry ingredients.

Composition

GRINDAMYL® A 5000 is composed of:

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

Physical/chemical specifications

Physical form	powder
Colour*	off-white
Enzyme activity	min. 5000 units/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

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

Valid from: March 31, 2011

PRODUCT DESCRIPTION - PD 40008-10.3EN

GRINDAMYL® A 5000

Bakery Enzyme

Nutritional data

Calculated values per 100 g

Energy	297/1247 kcal/kJ
Protein	15-26 g
Carbohydrates	48-58 g
Fat	less than 1 g
Sodium chloride	14-20 g
Moisture	5-9 g
Ash	17-25 g

Storage

GRINDAMYL® A 5000 should be stored dry and cool (max. 25°C/77°F).

The shelf life of GRINDAMYL® A 5000 is 18 months when stored as recommended in unbroken packaging.

Packaging

Cartons of 25 kg net.

Purity and legal status

GRINDAMYL® A 5000 meets the specifications laid down by the Joint FAO/WHO Expert Committee on Food Additives and the Food Chemicals Codex.

GRINDAMYL® A 5000 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® A 5000 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
X		Wheat	
X		Other cereals containing gluten	Wheat starch Maltodextrin Glucose (used in fermentation)*
	X	Crustaceans	
	X	Eggs	
	X	Fish	
	X	Peanuts	
(X)		Soybeans	Considered consumed during fermentation.* 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 manufactures and Formulators of Enzyme products: http://www.amfep.org/documents/AmfepstatementScopeAllergyLabellingDirf