

## PRODUCT DESCRIPTION - PD 40159-9.2EN

### GRINDAMYL® H 460

Bakery Enzyme

#### Description

GRINDAMYL® H 460 is a fungal xylanase which is produced by fermentation with a selected strain of *Aspergillus niger*.

#### Application areas

Flour, bread and bakery products.

#### Potential benefits

- Improves baking performance of flour
- Increases volume of baked goods
- Improves dough stability
- Increases tolerance towards variations in process parameters
- Improves dough handling

#### Usage levels

Based on flour weight 15-50 ppm  
corresponding to 1.5-5 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® H 460 is mixed into flour, premixes or bread improvers together with other dry ingredients.

The effect of the enzyme will be optimal in a balanced combination with fungal alpha-amylase.

#### Composition

GRINDAMYL® H 460 is composed of:

- Sodium chloride
- Wheat starch
- Protein
- Trisodium citrate

#### Physical/chemical specifications

Physical form dust-reduced  
microgranulate  
Colour\* off-white

\*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 165/693 kcal/kJ  
Protein less than 6 g  
Fat less than 1 g  
Carbohydrates 32-40 g  
Sodium chloride 48-60 g  
Moisture 5-9 g  
Ash 50-62 g

#### Storage

GRINDAMYL® H 460 should be stored dry and cool (max. 25°C/77°F).

The shelf life of GRINDAMYL® H 460 is 24 months when stored as recommended in unbroken packaging.

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#### Packaging

Polyethylene-lined paper bags of 25 kg net.

#### Purity and legal status

GRINDAMYL® H 460 meets the specifications laid down by the Joint FAO/WHO Expert Committee on Food Additives and the Food Chemicals Codex.

GRINDAMYL® H 460 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® H 460 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 Wheat bran (used in fermentation)*
	X	Crustaceans	
	X	Eggs	
	X	Fish	
	X	Peanuts	
	X	Soybeans	
	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<sup>1, 2, 1</sup>  
Position paper sent by ETA to the FDA on September 12, 2005  
([www.enzymetechnicalassoc.org/Allergen%20psn%20paper-2.pdf](http://www.enzymetechnicalassoc.org/Allergen%20psn%20paper-2.pdf)).

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