



Viscozyme®

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In this product the key enzyme activity is provided by endo-beta-glucanase that hydrolyzes (1,3)- or (1,4)-linkages in beta-D-glucans

PRODUCT CHARACTERISTICS/PROPERTIES

| | |
|----------------------------|--|
| Component name | Beta-glucanase (endo-1,3(4)-) |
| Activity | 100 FBG/g |
| Side activities | The product contains activity of Xylanase Cellulase Hemicellulase |
| Color | Brown |
| Physical form | Liquid |
| Approximate density (g/ml) | 1.21 |

PRODUCT SPECIFICATION

| | Lower Limit | Upper Limit | Unit |
|-------------------------|--------------|-------------|-------|
| Beta-glucanase unit FBG | 100 | | /g |
| Total viable count | - | 10000 | /g |
| Coliform bacteria | - | 30 | /g |
| E.coli | Not Detected | | /25 g |
| Salmonella | Not Detected | | /25 g |
| Heavy metals | | Max 30 | mg/kg |
| Lead | | Max 5 | mg/kg |
| Arsenic | | Max 3 | mg/kg |
| Cadmium | | Max 0.5 | mg/kg |
| Mercury | | Max 0.5 | mg/kg |

The enzyme analytical method is available from the Customer Center or sales representative.

COMPOSITION

| Ingredients | Appr. % (w/w) |
|--|---------------|
| Water, CAS no. 7732-18-5 | 59.90 |
| Sucrose, CAS no. 57-50-1 | 23 |
| Sodium chloride, CAS no. 7647-14-5 | 10 |
| Beta-glucanase (endo-1,3(4)-), CAS no. 62213-14-3* | 7 |
| Potassium sorbate, CAS no. 24634-61-5 | 0.10 |

*Defined as enzyme conc. (dry matter basis)

ALLERGEN

| Allergen | Substance contained ¹ | Allergen | Substance contained ¹ |
|--|----------------------------------|--|----------------------------------|
| Celery | no | Molluscs | no |
| Cereals containing gluten ² | no | Mustard | no |
| Crustaceans | no | Nuts ³ | no |
| Egg | no | Peanuts | no |
| Fish | no | Sesame | no |
| Lupin | no | Soy | no |
| Milk (including lactose) | no | Sulphur dioxide/sulphites, more than 10 mg per kg or l | no |

¹Definition of substances according to EU Regulation 1169/2011, as amended. List covers allergens mentioned in 21 USC 301 (US) and GB 7718-2011 (China).

²i.e. wheat, rye, barley, oats, spelt, kamut

³i.e. almond, hazelnut, walnut, cashew, pecan nut, Brazil nut, pistachio nut, macadamia nut and Queensland nut

NUTRITIONAL VALUES

The product has a typical nutritional value of approximately 511 kJ/100 g enzyme product.

| | |
|----------------|----------------|
| • Protein | 7 g/100 g |
| • Carbohydrate | 23 g/100 g |
| • Organic acid | 0 g/100 g |
| • Ash | 10 g/100 g |
| - Sodium | (3.90 g/100 g) |
| • Moisture | 60 g/100 g |

GM STATUS

This product is not a GMO.

Production organism Aspergillus aculeatus

The enzyme product is manufactured by fermentation of a microorganism that is not present in the final product. The production organism is not modified using modern biotechnology.

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STORAGE CONDITION

Recommended storage: 0-10 °C (32-50 °F)

Packaging must be kept intact, dry, and away from sunlight. Please follow the recommendations and use the product before the best before date to avoid the need for a higher dosage.

Best before: You will find the best before date in the certificate of analysis or on the product label.

The product gives optimal performance when stored as recommended and used within 24 months of the production date.

Novozymes guarantees delivery at least 6 months prior to the best-before date.

The product can be transported at ambient temperature. Following delivery, the product should be stored as recommended.

SAFETY AND HANDLING PRECAUTIONS

Enzymes are proteins. Inhalation of dust or aerosols may induce sensitization and may cause allergic reactions in sensitized individuals. Some enzymes may irritate the skin, eyes, and mucous membranes upon prolonged contact. See the MSDS or Safety Manual for further information regarding safe handling of the product and spills.

COMPLIANCE

The product complies with the recommended purity specifications for food-grade enzymes given by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Food Chemical Codex (FCC).

Kosher and Halal certificates are available from the Customer Center or sales representative.

CERTIFICATIONS

Novozymes is a signatory to United Nations Global Compact, United Nations Convention on Biological Diversity and report on our sustainability performance through Global Reporting Initiative (GRI). See all our commitments under sustainability on www.novozymes.com.



FOOD SAFETY

Novozymes has carried out a hazard analysis and prepared an HACCP plan describing the critical control points (CCPs). The HACCP plan is supported by a comprehensive prerequisite program implemented in Novozymes' GMP practices.

The product is produced according to Novozymes' HACCP plan, GMP practices, and additional requirements controlled by Novozymes' Quality Management System.

The product complies with FAO/WHO JECFA- and FCC-recommended purity requirements regarding mycotoxins. The product complies with EU legislation regarding pesticides.

The product is produced under FSSC 22000 certification.



PACKAGING

The product is available in different types of packaging. Please contact the sales representative for more information.