

# Pectinex® Ultra Mash

In this product the key enzyme activity is provided by pectin lyase catalyzing eliminative cleavage of (1,4)-alpha-D-galacturonan methyl ester giving oligosaccharides with 4-deoxy-6-O-methyl-alpha-D-galact-4-enuronosyl groups at their non-reducing ends

## PRODUCT CHARACTERISTICS/PROPERTIES

|                            |  |
|----------------------------|--|
| Component name             | Pectin lyase   |
| Activity                   | 9500 PECTU/g   |
| Other activities           | Polygalacturonase  |
| Color                      | Brown  |
| Physical form              | Liquid   |
| Approximate density (g/ml) | 1.15   |
| Odor                       | Slight fermentation odor   |
| Solubility                 | Active component is readily soluble in water at all concentrations that occur in normal usage. Standardisation components can cause turbidity in solution. |

Color can vary from batch to batch. Color intensity is not an indication of enzyme activity.

## PRODUCT SPECIFICATION

|                      | Lower Limit  | Upper Limit | Unit  |
|----------------------|--------------|-------------|-------|
| Pectinase unit PECTU | 9500         |             | /g    |
| pH at 25°C           | 3            | 5           |       |
| Total viable count   | -            | 50000       | /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 Novozymes Market or customer sales representative.

## COMPOSITION

| Ingredients                           | Appr. % (w/w) |
|---------------------------------------|---------------|
| Glycerol, CAS no. 56-81-5             | 49.50         |
| Water, CAS no. 7732-18-5              | 44            |
| Pectin lyase, CAS no. 9033-35-6*      | 3             |
| Polygalacturonase, CAS no. 9032-75-1* | 3             |
| Potassium chloride, CAS no. 7447-40-7 | 0.50          |

\*Defined as enzyme conc. (dry matter basis)

No preservatives added

## ALLERGEN

| Allergen                                 | Substance contained <sup>1</sup> | Allergen   | Substance contained <sup>1</sup> |
|--|----------------------------------|--|----------------------------------|
| Celery                                   | no                               | Molluscs   | no                               |
| Cereals containing gluten <sup>2,4</sup> | no                               | Mustard  | no                               |
| Crustaceans                              | no                               | Nuts <sup>3</sup>                                      | 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                               |

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

<sup>2</sup>i.e. wheat, rye, barley, oats, spelt, kamut

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

<sup>4</sup> If No: Glutenfree i.e. < 20ppm (EU Regulation 828/2014)

Novozymes A/S  
Krogshøjvej 36  
DK-2880 Bagsværd  
Emma Green

## Product Data Sheet

Valid from 2017-08-24

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### NUTRITIONAL VALUES

The product has a typical nutritional value of approximately 602 kJ/100 g enzyme product.

|            |            |
|------------|------------|
| • Protein  | 6 g/100 g  |
| • Polyols  | 49 g/100 g |
| • Ash      | 1 g/100 g  |
| • Moisture | 44 g/100 g |

### GM STATUS

This product is not a GMO.

**Production organism** *Aspergillus aculeatus*  
*Aspergillus niger*

The enzyme product is manufactured by fermentation of microorganisms that are not present in the final product. The production organisms are not modified using modern biotechnology.

### 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 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 Safety data sheet for further information regarding safe handling of the product and spills.

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### 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), and with relevant Chinese food safety and product standards for food-grade enzymes.

Kosher and Halal certificates are available from Novozymes Market or customer sales representative.

If used as processing aid in the production of food the final product may be classified as "organic" by relevant authorised associations.

### 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](http://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.

### PACKAGING

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

For more information, or for office addresses, visit [www.novozymes.com](http://www.novozymes.com)

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