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PRODUCT SPECIFICATION

PRODUCT DETAILS

Product Name Bioferm LC (25Kg)
Kerry Code 20688719
Legacy
Product Description Bioferm LC is a liquid fungal alpha amylase derived from a selected strain of *Aspergillus oryzae*. Alpha amylase hydrolyses the alpha 1,4 glycosidic linkages in amylose and amylopectin, resulting in the production of dextrans and fermentable sugars. This product is made from a natural raw material and as such may be subject to some batch to batch colour and/or odour variation, but these variations are not an indicator of enzyme activity and do not impact on product performance.

INGREDIENT LISTING

Water, Glycerol, Enzyme, Potassium sorbate

USAGE / APPLICATION INFORMATION

Bioferm LC is used in cereal extraction during mash saccharification where grists contain up to 100% unmalted cereal. Dose rate could be 0.04-0.15% on dry weight of grist.

KEY PARAMETERS

Test	Min	Max	Units
Fungal Alpha Amylase	900000	1170000	u/ml

MICROBIOLOGICAL DATA

Total Viable Count	<50000 cfu/g
Coliforms	<30 cfu/g
E. coli	Absent/25 g
Salmonella	Absent/25 g

20688719

Spec Version:
Spec Status:

Issue date: 8/26/2021
Revision Date: 4/27/2022

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ALLERGEN DATA	
Allergen	Present Yes/No
Beef and products thereof	No
Carrot and products thereof	No
Celery and products thereof	No
Cereals containing gluten(1)	No
Chicken meat and products thereof	No
Cocoa and products thereof	No
Coriander and products thereof	No
Corn/maize and products thereof	No
Crustaceans and products thereof	No
Egg and products thereof	No
Fish and products thereof	No
Glutamate and products thereof	No
Milk and products thereof (including lactose)	No
Mustard and products thereof	No
Nuts (other than peanuts) and products thereof(2)	No
Molluscs and products thereof	No
Legumes and products thereof	No
Lupin and products thereof	No
Peanuts and products thereof	No
Pork and products thereof	No
Sesame Seeds and products thereof	No
Soybeans and products thereof	No
Sulphur Dioxide/Sulphites > 10ppm	Yes
Wheat and products thereof(3)	No
<p>Note: All reasonable precautions that could be expected of a responsible manufacturer have been taken to prevent cross contamination in the raw materials used and in the manufacturing process. Product has been produced in a plant that handles cereals containing gluten (primary wheat flour).</p> <p>Definitions conform to Regulation (EU) 1169/2011 as amended, US Food Allergen Labelling and Consumer Protection Act (FALCP) and ALBA-List.</p> <p>(1) i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strain</p> <p>(2) Nut allergens: Almond <i>Prunus dulcis</i> (Rosaceae) Beech nut <i>Fagus</i> spp. (Fagaceae), Brazil nut <i>Bertholletia excelsa</i> (Lecythidaceae), Butternut <i>Juglans cinerea</i> (Juglandaceae), Cashew <i>Anacardium occidentale</i> (Anacardiaceae), Chesnut (Chinese, American, European, Seguin) <i>Castanea</i> spp.(Fagaceae), Chinquapin <i>Castanea pumila</i> (Fagaceae), Coconut <i>Cocos nucifera</i> L. (Arecaceae (alt. Palmae)), Fibert/Hazelnut <i>Corylus</i> spp. (Betulaceae), Ginko nut <i>Ginkgo biloba</i> L.(Ginkgoaceae), Hickory nut <i>Carya</i> spp.(Juglandaceae), Lichee nut <i>Litchi chinensis</i> Sonn. (Sapindaceae), Macadamia nut/Bush nut <i>Macadamia</i> spp.(Proteaceae), Pecan <i>Carya illinoensis</i> (Juglandaceae), Pine nut/Pinon nut <i>Pinus</i> spp. (Pineaceae), Pili nut <i>Canarium ovatum</i> (Burseraceae), Pistachio <i>Pistacia vera</i> L. (Anacardiaceae), Sheanut <i>Vitellaria paradoxa</i> (Sapotaceae), Walnut (English, Persian, Black, Japanese, California), Heartnut, <i>Juglans</i> spp.(Juglandaceae)</p> <p>(3)i.e. common wheat, durum wheat, club wheat, spelt, semolina, Einkorn,emmer, kamut and triticale</p>	

SUITABILITY DATA	Yes = Suitable, No = Unsuitable	Comment/Certification Status
Vegetarian (Ova-lacto)	Yes	
	Certified / Not Certified	Comment
Halal	Not Certified	Suitable
Kosher	Not Certified	Suitable

NUTRITION INFORMATION		
Nutrient	Typical Value	Unit
Energy	697	kJ/100 g
Energy	164	kCal/100 g
Total Carbohydrates	30	g/100 g
Total Fat	0	g/100 g
Protein	11	g/100 g
Moisture	58	g/100 g
Ash	1	g/100 g
Data Source		
Values quoted are typical and should be used for guidance purposes only.		

GMO STATUS
This product is not a GMO. The production strain is not present in the final enzyme product. The production strain has not been improved by means of modern biotechnology.

PROCESS SUMMARY
Kerry has implemented and maintains food hygiene standards and HACCP Plans in line with the requirements of food legislation.
The Carrigaline, Co Cork site is certified against the requirements of FSSC22000 and ISO14001.

RECOMMENDED SHELF-LIFE & STORAGE	
Transport & Storage Conditions:	Refrigerated transport is not required, but prolonged storage should be dry, at 10°C or below. When stored at 10°C or below, product will maintain at least 95% activity for a minimum of 24 months. After this time period reassay is advisable.
Shelf life (original package):	365 days (12 months)

PACKAGING	
Pack Size (Net)	25 Kg
Pack Type Inner	Plastic drum
Pack Type Outer	Plastic drum

HEALTH & SAFETY DATA
Liquid enzyme products may cause skin or eye irritation and inhalation of aerosol can result in sensitisation of susceptible individuals. Standard handling procedures should be followed to prevent direct contact with the product or inhalation of aerosol." & chr (10) & "A separate Safety Data Sheet (SDS) is available on request.

LEGISLATION & WARRANTY STATEMENT

We warrant that the product is manufactured in accordance with the specification and is manufactured and packaged in compliance with all EU food and food safety legislation applicable to products of this nature at time of manufacture and sale by us. We warrant that the product also complies with the food purity specifications for food-grade enzymes recommended by the JECFA and recommended in the Food Chemical Codex.

We make no further warranty in relation to the product or as to the suitability of the product for any specific purpose or application. The user should satisfy itself as to the suitability of the product as an ingredient in a specific application or for any use whatsoever. The information supplied in this specification sheet is in accordance with our product formulation, is also based on manufacturing plant data and on data provided by our raw material suppliers and is accurate to the best of our knowledge at the date of issue of this specification. Local national regulations should also be consulted by user in relation any specific application and in relation to appropriate ingredient declarations as legislation may vary from country to country.

CONFIDENTIALITY

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