

Kerry Food Ingredients (Cork) Limited

Kilnagleary, Carrigaline, Cork Ireland

Phone: +353214376400 Fax: +353214376480

PRODUCT SPECIFICATION

PRODUCT DETAILS

Product Name Hitempase 2XL (25Kg)

Kerry Code 20267866

Legacy

Product Description Hitempase 2XL is a heat stable alpha amylase derived a strain of Bacillus

licheniformis. Hitempase 2XL is an endo-amylase which randomly hydrolyses the alpha 1,4 glycosidic linkages in amylose and amylopectin, resulting in the production of dextrins. 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, Gycerol, Sucrose, Sodium Chloride, Enzyme, Maltodextrin, Sodium Benzoate, Potassium Sorbate

USAGE / APPLICATION INFORMATION

Hitempase 2XL is used in the distilling industry for effective liquefaction of starch in grists containing up to 100% unmalted cereal (0.05-0.1% on weight of dry grist).

Benefits

- · Allows new, more cost effective, local raw material sources to be used, but maintains final product integrity
- · Increases extract yield
- · Longer filtration runs
- Reduces total cost (optimum cost per hl of beer) and reduces carbon footprint

The recommended dose rate is 0.25-0.5 Kg/tonne of starch (dry weight) for complete liquefaction within 90 mins at 95-100°C. It is added to the cereal/mash cooker on mashing in and rapidly breaks down starches to soluble maltodextrins.

KEY PARAMETERS

Test	Min	Max	Units
Bacterial Alpha Amylase	114000	148200	u/ml

MICROBIOLOGICAL DATA

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

20267866 - 003 Issue date: 9/22/2022 Revision Date: 9/22/2022

 Spec Version:
 Revision Date:
 9/22/2022

 Spec Status:
 Page 1 of 5



Kerry Food Ingredients (Cork) Limited
Kilnagleary,
Carrigaline,
Cork Ireland

Phone: +353214376400 Fax: +353214376480

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	No		
Wheat and products thereof(3)	No		

Definitions conform to Regulation (EU) 1169/2011 as amended, US Food Allergen Labelling and Consumer Protection Act (FALCP) and ALBA-List.

- (1) i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strain
- (2) Nut allergens: Almond Prunus dulcis (Rosaceae) Beech nut Fagus spp. (Fagaceae), Brazil nut Bertholletia excelsa (Lecythidaceae), Butternut Juglans cinerea (Juglandaceae), Cashew Anacardium occidentale (Anacardiaceae), Chesnut (Chinese, American, European, Seguin) Castanea spp. (Fagaceae), Chinquapin Castanea pumila (Fagaceae), Coconut Cosos nucifera L. (Arecaceae (alt. Palmae)), Fibert/Hazelnut Corylus spp. (Betulaceae), Ginko nut Ginkgo biloba L. (Ginkgoaceae), Hickory nut Carya spp. (Juglandaceae), Lichee nut Litchi chinensis Sonn. (Sapindaceae), Macadamia nut/Bush nut Macadamia spp. (Proteaceae), Pecan Carya illinoiesis (Juglandaceae), Pine nut/Pinon nut Pinus spp. (Pineaceae), Pili nut Canarium ovatum (Burseraceae), Pistachio Pistacia vera L. (Anacardiaceae), Sheanut Vitellaria paradoxa (Sapotaceae), Walnut (English, Persian, Black, Japanase, California), Heartnut, Juglans spp. (Juglandaceae)

(3)i.e. common wheat, durum wheat, club wheat, spelt, semolina, Einkorn, emmer, kamut and triticale

20267866 - 003 Issue date: 9/22/2022 Revision Date: 9/22/2022

Spec Version: Spec Status:

Page 2 of 5



Kerry Food Ingredients (Cork) Limited
Kilnagleary,
Carrigaline,
Cork Ireland

Phone: +353214376400 Fax: +353214376480

SUITABILITY DATA

Yes = Suitable, Comment/Certification Status

No = Unsuitable

Vegetarian (Ova-lacto) Yes

Halal Certified Comment
Kosher Certified Suitable
Certified Suitable

NUTRITION INFORMATION

Nutrient	Typical Value	Unit
Energy	841	kJ/100 g
Energy	201	kCal/100 g
Total Carbohydrates	41	g/100 g
Total Fat	1	g/100 g
Protein	7	g/100 g
Moisture	49	g/100 g
Ash	2	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 product. The Bacillus licheniformis production strain has 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: Temperature controlled transport is not required, but prolonged storage

should be dry, at 18°C or below. When stored at 18°C or below, product will maintain at least 95% activity for a minimum of 12 months. After this time period reassay is advisable. It should not be stored at temperatures above

25°C.

Shelf life (original package): 365 days (12 months)

PACKAGING

Pack Size (Net) 25 Kg

Pack Type Inner Plastic drums
Pack Type Outer Plastic drums

HEALTH & SAFETY DATA

20267866 - 003 Issue date: 9/22/2022 Revision Date: 9/22/2022

Spec Version: Revision Date: 9/22/2022
Spec Status: Page 3 of 5



Kerry Food Ingredients (Cork) Limited Kilnagleary,

Carrigaline, Cork Ireland

Phone: +353214376400 Fax: +353214376480

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.

20267866 - 003 Issue date: 9/22/2022

Spec Version: Revision Date: 9/22/2022

Spec Status: Page 4 of 5



Kerry Food Ingredients (Cork) Limited
Kilnagleary,
Carrigaline,
Cork Ireland

Phone: +353214376400 Fax: +353214376480

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

This document and the information contained within it remains the property of Kerry Group and must not be disclosed to any third party without prior written permission of the company.

20267866 - 003 Issue date: 9/22/2022

 Spec Version:
 Revision Date:
 9/22/2022

 Spec Status:
 Page 5 of 5