

PRODUCT TECHNICAL DOSSIER

AMYLASE 50,000 SKB

Product Code:

P01154

Raw Material Full Name:

Alpha-amylase

This material is Food Grade:

✓

Vegan / Vegetarian Status:

Vegan ✓

Vegetarian ✓

Limit/Range/Specification:

Enzyme activity:

47,000 SKB u/g – 53,000 SKB u/g

Working pH:

4.5 – 6.0

Temperature Range:

50 – 55°C

CAS Number:

9001-19-8

Solubility in Water:

Partly soluble

Country of Origin:

Europe

Country of Origin of the Manufacture:

UK

Base Source/Start Material:

Aspergillus oryzae

Origin of Product – Synthetic, Plant, Mineral, Animal, Fish or Fermented:

Fermented

Product Code: P01154

Version: 1

Page 1 of 14



success starts with the finest ingredients...

Medium Used:

Soy protein

Solvents used:

None

Compound Ingredients Origin, Function and Percentages:

Amylase enzyme preparation 60%

Wheat Flour 40%

Shelf Life from Date of Manufacture:

12 Months

Storage Conditions:

< 20°C Away from moisture and direct sunlight

Appearance (Fine/Crystals/Crystalline/Hygroscopic):

Fine powder

Colour:

White to off white

Flavour/Taste:

Characteristic

Odour:

Characteristic

Microbiological Test

Total Viable Count:

Max 5 x 10⁴ cfu/g

Coliforms:

< 30/g

E.Coli:

Absent in 25g

Salmonella:

Absent in 25g



Heavy Metals

Heavy Metals:

Max 30 ppm

Lead (Pb):

Max 3 ppm

Cadmium (Cd):

Max 1 ppm

Mercury (Hg):

Max 0.1 ppm

Arsenic (As):

Max 1 ppm

Pharmacopeia Standard Used:

FCC/JECFA/WHO/FAO

There are no nuts in this recipe; however we cannot guarantee that the raw materials entering the site are nut free.

Please note that surveillance testing may mean that not all the parameters stated on this specification are tested for every batch.



ALLERGENS	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Peanuts and Peanut Derivatives (There are no nuts in this recipe, however CCL cannot guarantee that the raw materials entering the site are nut free.)	NO	NO	
Other Nut and Nut Derivatives <i>Almond (Amygdalus communis L.), Hazelnut (Corylus avellana), Walnut (Juglans regia), Cashew (Anacardium occidentale), Pecan nut (Carya illinoensis (Wangenh.) K. Koch), Brazil nut (Bertholletia excelsa), Pistachio nut (Pistacia vera), Macadamia nut and Queensland nut (Macadamia ternifolia)</i> (There are no nuts in this recipe, however CCL cannot guarantee that the raw materials entering the site are nut free.)	NO	NO	
Sesame Seeds and Sesame Seed Derivatives	NO	NO	
Other Seeds and Seed Derivatives (Poppy Seeds, Cotton Seeds, Sunflower Seeds)	NO	NO	
Milk and Milk Derivatives (including lactose)	NO	NO	
Egg and Egg Derivatives	NO	NO	
Cereals and Derivatives containing OR POTENTIALLY CONTAMINATED WITH Gluten <i>(wheat, wheatgrass, faro, freekeh, spelt, kamut, rye, oats, barley, barley grass)</i>	YES	YES	Wheat Flour
Soya and Soya Derivatives	NO	YES	Fermented on soy substrate
Lupin and Lupin Derivatives	NO	NO	
Mustard and Mustard Derivatives	NO	NO	
Celery or Celery Derivatives (including Celeriac)	NO	NO	
Fish and Fish Derivatives	NO	NO	
Molluscs and their Derivatives	NO	NO	
Crustaceans and their Derivatives	NO	NO	
Sulphur Dioxide and Sulphites (E220, E228) at levels > 10mg/kg or 10mg/litre	NO	NO	

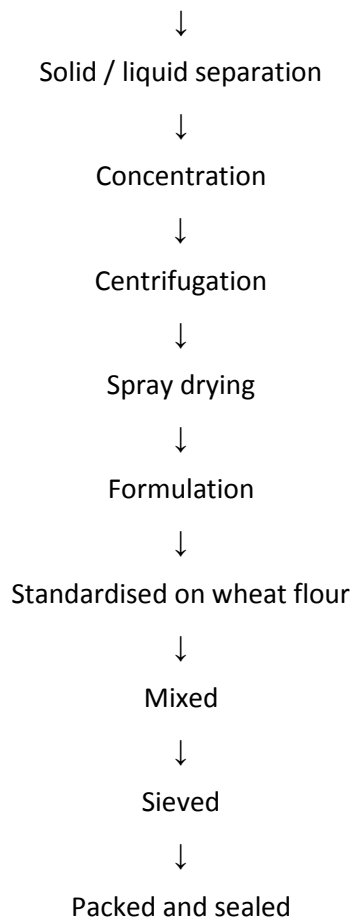


ADDITIVES / CONTAMINANTS / DIETARY REQUIREMENTS	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Additives	NO	NO	
Antioxidants	NO	NO	
Ethylene Oxide	NO	NO	
Gelatine	NO	NO	
Flavourings (Artificial / Nature Identical / Natural / Smoked)	NO	NO	
Maize / Corn and any Derivatives	NO	NO	
Legumes / Pulses	NO	NO	
Rice and Rice Derivatives	NO	NO	
Added Salt	YES	YES	Added in enzyme concentrate
Added Sugar / artificial or natural sweeteners	NO	NO	
Aspartame	NO	NO	
BHA / BHT (E320 / E321)	NO	NO	
Caffeine	NO	NO	
Colours (Artificial / Nature Identical / Natural / Smoked)	NO	NO	
Dextrose	NO	NO	
Dioxins	NO	NO	
MSG (Added and Naturally Occurring E621) or Glutamates (E620 to E625)	NO	NO	
Nucleotides (E627, E630, E631, E635)	NO	NO	
Polyols (sugar alcohols)	NO	YES	No risk of cross-contamination
Benzoates (E210 / E219)	NO	YES	
Sorbic Acid (E200, E203)	NO	YES	
Any other Preservatives	NO	NO	
Ethanol	NO	NO	
Honey	NO	NO	
Lactose	NO	YES	No risk of cross-contamination
Yeast and Yeast Derivatives	NO	YES	
All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.)	NO	NO	
Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.)	NO	NO	



PRODUCTION FLOW CHART

Fermentation of *Aspergillus oryzae* on soy substrate



CONFIRMATION OF BSE/TSE STATUS

This is to certify that this product complies with all relevant current UK and EU Legislative requirements in regard to Transmissible Spongiform Encephalopathies (TSE) and Bovine Spongiform Encephalopathy (BSE) for human food, and so is free of TSE/BSE.

This is also to certify that, during the course of their manufacture, the above-mentioned product did not come into contact with any materials, which could be derived from TSE/BSE risk materials.

CONFIRMATION OF GM STATUS

This is to certify that this product is not manufactured from GM raw materials and is therefore not subject to labelling under regulations 1829/2003/EC and 1830/2003/EC.

CONFIRMATION OF NON IRRADIATION STATUS

This is to certify that this product, whole or in part, has not been subjected to Ionising Radiation as per European Directives 1999/3/EC.

CONFIRMATION OF NANDROLONE STATUS

This is to certify that this product, whole or in part, has not come into contact with Nandrolone or any of its precursors in any way.

CONFIRMATION OF IOC PRODUCT STATUS

This is to certify that this product, whole or in part, has not come into contact with any product/s, which is banned by the IOC (International Olympics Committee) and or WADA.

CONFIRMATION OF ANIMAL TESTING STATUS

This is to certify that all the products sold by Cambridge Commodities have not been tested on animals in any part of its manufacture in accordance with regulation 86/609/EEC.

CONFIRMATION OF PESTICIDES STATUS

This is to certify that the above-mentioned product complies with the regulation (EC) No.396/2005 of 23rd February 2005 and commission Regulation (EU) No. 559/2011 of 7th June 2011 amending annexes II and III of the above Regulation.

CONFIRMATION OF NANOPARTICLE STATUS

This is to certify that unless otherwise stated, the above-mentioned product is free of nanoparticles. Commission Recommendation 2011/696/EU, defines as follows: "'Nanomaterial' means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm".



MATERIAL SAFETY DATA SHEET

Section 1 Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product Name: Amylase 50,000u/g
Product Code: P01154

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Use of substance/mixture: This product is an enzymatic preparation used in the food industry.

1.3 Details of the supplier of the Safety Data Sheet

Company: Cambridge Commodities Limited
Lancaster Way, Ely, Cambridgeshire, CB6 3NX
Email: qa@c-c-l.com

1.4 Emergency Telephone Number


Telephone Number: 01353 667258

Section 2 Hazards Identification

2.1 Classification of the substance or mixture

Classification under CHIP: Sens.: R42
Most important adverse effects: May cause sensitisation by inhalation
Classification under CLP: This product has no classification under CLP.

2.2 Label Elements

Label Elements under CHIP: Hazard Symbols: 
Risk Phrases: R42: May cause sensitisation by inhalation.
Safety Phrases: S22: Do not breathe dust.
S24: Avoid contact with skin.
S36/37: Wear suitable protective clothing and gloves

2.3 Other Hazards

PBT: This substance is not identified as a PBT substance.

Section 3 Composition/Information on Ingredients

3.1 Mixtures

Hazardous Ingredients:	Alpha-Amylase
EINECS Number:	232-565-6
CAS Number:	9000-90-2
CHIP Classification:	Sens.: R42
CLP Classification:	Resp. Sens. 1: H334
Percent:	50% - 70%

Section 4 Emergency and First Aid Measures

4.1 Description of First Aid Measures

Skin contact:	Rinse with plenty of running water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur.
Eye contact:	Rinse eye thoroughly with eye wash or running water. Obtain medical attention if symptoms occur.
Ingestion:	If swallowed, rinse mouth with water (only if the person is conscious). Obtain medical attention if symptoms occur.
Inhalation:	Supply fresh air. Obtain medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact:	Irritation & redness.
Eye contact:	Irritation & redness.
Ingestion:	Irritation.
Inhalation:	Shortness of breath, wheezing and coughing. The effect of inhalation may be delayed.
Delayed/immediate effects:	Delayed effects can be expected after long-term exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate/special treatment:	Not applicable
------------------------------	----------------

Section 5 Fire-fighting measures

5.1 Extinguishing Media

Extinguishing media:	Suitable extinguishing media for the surrounding fire should be used. Avoid creating inhalable dust or aerosols from the product.
----------------------	---

5.2 Special hazards arising from the substance or mixture

Exposure hazards: May cause allergic respiratory reaction.

5.3 Advice for fire-fighters

Advice for fire-fighters: Wear respiratory protection to prevent inhalation of dust or aerosols (section 8). Wear protective clothing to prevent contact with skin and eyes.

Section 6 Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SOS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Spilt material should be removed promptly to avoid formation of inhalable dust. Avoid discharge of water used for cleaning to surface water drainage (storm drains).

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Take up, preferably by mechanical means. Clean up residues with large amounts of water (discharge to foul sewer only).

6.4. Reference to other sections

Reference to other sections: Refer to section 8.

Section 7 Handling and Storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is exhaust ventilation of the area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep cool. See label or product literature for recommended storage temperature.

Suitable packaging: It is recommended that the product is stored in the original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8 Exposure Controls/Personal Protection

8.1. Control parameters

Workplace exposure limits: Not applicable.

8.2. Exposure controls

Engineering measures: Ensure there is exhaust ventilation of the area.
Respiratory protection: Particle filter class P3S (EN143).
Hand protection: Protective gloves.
Eye protection: If eye-protection is not an integral part of the respiratory protection being worn, then wear tightly fitting safety goggles.
Skin protection: Protective clothing.

Section 9 Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State: Powder
Odour: Characteristic odour

9.2 Other Information

No data available.

Section 10 Stability and Reactivity

10.1 Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.



10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: None known.

10.5. Incompatible materials

Materials to avoid: None known.

10.6. Hazardous decomposition products

Haz. decomp. Products: None known.

Section 11 Toxicological Information

11.1. Information on toxicological effects

Relevant effects for Mixture: Effect: Sensitisation
Route: INH
Basis: Hazardous: Calculated

11.2 Symptoms/Routes of Exposure

Skin contact: Irritation & redness.
Eye contact: Irritation & redness.
Ingestion: Irritation.
Inhalation: Shortness of breath, wheezing and coughing. The effect of inhalation may be delayed.
Delayed/immediate effects: Delayed effects can be expected after long-term exposure.

Section 12 Ecological Information

12.1 Toxicity

Ecotoxicity values: Not applicable.

12.2 Persistence and Degradability

Persistence and Degradability: Biodegradable.

Product Code: P01154

Version: 1

Page 12 of 14



success starts with the finest ingredients...

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

No data available.

Section 13 Disposal Considerations

13.1. Waste treatment methods

The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14 Transport Information

14.1 Transport Class

This product does not require a classification for transport.

Section 15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.



Section 16 Other Information

16.1 Other Information

This advice is given by Cambridge Commodities Ltd who accepts no legal liability for it. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

Individuals working with chemicals should consider all chemicals to be potentially hazardous even if their individual hazards may be uncharacterised or unknown.



This Information provided in this document is subject to change and the batch specific Certificate of Analysis should always be referenced.

To be used as per local legislation.

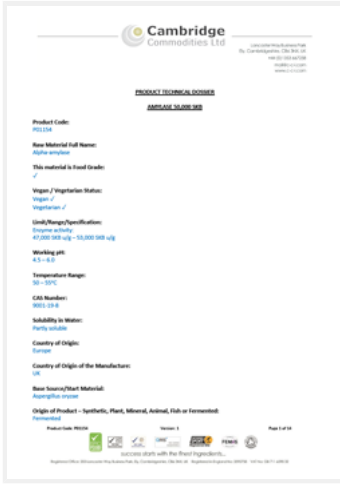
Change History

Version	Change	Customer Notification required Yes / No
1	First Issue	N/A

Document Approval

Originator Job Title	QC Technician	Approver Job Title	Quality Specialist
 Ash Bean (May 18, 2016)		 Nanci-Marie Smith (May 18, 2016)	











P01154 - Amylase 50,000u.g - Technical Dossier

Adobe Sign Document History

05/18/2016

Created:	05/18/2016
By:	Ash Bean (ash.bean@c-c-l.com)
Status:	SIGNED
Transaction ID:	CBJCHBCAABAAiqY9SgJtYtFshjRuHd2iUPT_e54_1f6l

“P01154 - Amylase 50,000u.g - Technical Dossier” History

-  Document uploaded by Ash Bean (ash.bean@c-c-l.com) from Reader
05/18/2016 - 8:40:34 PDT - IP address: 81.145.42.226
-  Document signed in Reader by Ash Bean (ash.bean@c-c-l.com)
Signature Date: 05/18/2016 - 8:40:56 PDT - Time Source: server - IP address: 81.145.42.226
-  Document emailed to Nanci-Marie Smith (Nanci-Marie.Smith@c-c-l.com) for signature
05/18/2016 - 8:40:57 PDT
-  Document viewed by Nanci-Marie Smith (Nanci-Marie.Smith@c-c-l.com)
05/18/2016 - 9:09:54 PDT - IP address: 81.145.42.226
-  Document e-signed by Nanci-Marie Smith (Nanci-Marie.Smith@c-c-l.com)
Signature Date: 05/18/2016 - 9:11:01 PDT - Time Source: server - IP address: 81.145.42.226
-  Signed document emailed to Ash Bean (ash.bean@c-c-l.com) and Nanci-Marie Smith (Nanci-Marie.Smith@c-c-l.com)
05/18/2016 - 9:11:01 PDT