

<u>PRODUCT SPECIFICATION</u>	
Packer:	Steenbergs Limited
Product:	Arrowroot; <i>Manihot utilissima</i>

Physical standards

Product description	Cassava Arrowroot; <i>Manihot utilissima</i>	
Appearance	Fine, white powder	
Flavour and aroma	Neutral flavour and no aroma	
Size	<500µ	
Percentage purity	99.9%	
Organic	Yes / No	
Fairtrade	Yes / No	

Ingredients

Ingredients	E number	%	Country of origin	Function
Arrowroot	n/a	100	Various	Thickening agent

Storage and shelf life

Storage	Ambient (8-20°C), dry (max Rh = 60%) conditions
Shelf life from packing	730 days
Shelf life once opened	365 days

Label and traceability

Legal Information	Arrowroot
Traceability information	Batch code & best before placed on label in field of view
Country of origin	Brazil

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Packaging

Glass jars

Item	Material description	Dimensions	Weight/unit	Per case	Weight/case	Recyclability
Outer packaging	Corrugated – outer case	134mm x 157mm x 232mm	90.3g	1	90.3g	Compostable/recyclable
Outer packaging	Corrugated – inner case	23mm x 63mm x 147mm	43.1g	1 or 2	43.1g/86.2g	Compostable/recyclable
Food contact packaging	Stainless steel twist-off cap with non-PVC plastic gasket	10mm x 69mm 8mm x 44mm	8.7g 4.8g	6 or 12 28	52.2g/104.4g 134.4g	Recyclable through kerbside schemes & similar commercial programmes
Food contact packaging	Glass jar	275ml: 115mm x 60mm 125ml: 60mm x 60mm 33ml: 40mm x 42mm	179.6g 107.7g 49.1g	6 12 28	1,077.6g 1,292.4g 1,374.8g	Recyclable through kerbside schemes & similar commercial programmes
Food contact packaging complies with current legislation?		Yes/ No	Total case weight (ex-product)	275ml 125ml 33ml	1,263.2g 1,573.3g 1,685.7g	Pallet: 25 cases (layer) x 10 cases (high) 250 cases = 1,500, 3,000 or 7,000 units

Tinplate canisters

Item	Material description	Dimensions	Weight/unit	Per case	Weight/case	Recyclability
Outer packaging	Corrugated outer case	118mm x 107mm x 167mm	40.6g	1	40.6g	Compostable/recyclable
Food contact packaging	Tinplate canister, including PET clear window in cap	110mm x 50mm	47.1g	6	282.6g	Tinplate = recyclable; PET window = recyclable via drinks' bottle schemes
Food contact packaging complies with current legislation?		Yes/ No	Total case weight (ex-product)		323.2g	Pallet: 49 cases (layer) x 12 cases (high) 588 cases = 3,528 canisters

Stand-up pouches

Item	Material description	Dimensions	Weight/unit	Per case	Weight/case	Recyclability
Outer packaging	Corrugated outer case (typical size)	134mm x 157mm x 232mm	90.3g	1	90.3g	Compostable/recyclable
Food contact packaging	PE and metallised PET	100g; 209mm x 129mm 500g; 264mm x 188mm	10.1g 17.5g	6 3	60.6g 52.5g	Difficult to recycle, except via specialist schemes => landfill
Food contact packaging complies with current legislation?		Yes/ No	Total case weight	100g 500g	150.9g 142.8g	

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Chemical standards

Test	Units	Specification	Method
Aflatoxin B1	µg/kg	<5	Laboratory specific
Total (B1, B2, G1, G2)	µg/kg	<10	Laboratory specific
Ochratoxin A	µg/kg	<30	Laboratory specific
Pesticides ⁽ⁱ⁾	mg/kg	<0.01	Laboratory specific

Laboratory used	Eurofins, or equivalent
Accreditation status	UKAS 0342

(i) Organochlorine, organophosphate and pyrethroid pesticides, plus other pesticides per current laboratory test suite. Limits set by certain EC countries are 0.01mg/kg but some can only be tested to 0.05mg/kg limits of quantification. This is regarded as technical absence.

Microbiological standards

Test	Units	Specification	Method
Total viable count	cfu/g	<1 x 10 ⁷	Laboratory specific
<i>E. coli</i>	cfu/g	<1 x 10 ²	Laboratory specific
<i>Salmonella</i>	cfu/g	Absent in 25g	Laboratory specific
<i>B. cereus</i>	cfu/g	<1 x 10 ³	Laboratory specific
<i>C. perfringens</i>	cfu/g	<1 x 10 ³	Laboratory specific
Yeasts	cfu/g	<1 x 10 ⁵	Laboratory specific
Moulds	cfu/g	<1 x 10 ⁵	Laboratory specific

Laboratory used	Foodtest Laboratories, or equivalent
Accreditation status	UKAS 1819

Food safety information (Critical Control Point)

Metal detection	Test piece size (mm)	Position of metal detector/magnet	Frequency of check
Ferrous	2.5	Goods in	On intake
Non ferrous	3.5	Goods in	On intake
Stainless steel	6.0	Goods in	On intake

Contaminants	
Does the product conform to current EU/UK pesticide legislation	✓
Does the product conform to current EU/UK heavy metal legislation	✓
Does the product conform to current EU/UK organic legislation	x

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GMO information

GMO status	YES	NO	Comment
1(a) Does the product contain, or may have been produced with the aid of any genetically modified organisms		√	
1 (b) Furthermore, has any processing aid used been produced with the aid of any genetically modified organism (with particular reference to enzyme preparations).		√	
If the answer to 1(a) and/or 1(b) is YES, is the product labelled in accordance to Regulation EC 1829/2003 and is traceable according to Regulation EC 1830/2003			

Allergen information

Allergen information	Does the product contain?		Present on site?		Cross contamination possible?		Comment
	YES	NO	YES	NO	YES	NO	
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) and products thereof		√	√			√	Prepacked products sold via website
Crustaceans and products thereof		√		√		√	
Eggs and products thereof		√		√		√	
Fish and products thereof		√	√			√	As above
Peanuts and products thereof		√	√			√	As above
Soybeans and products thereof		√	√			√	As above
Milk and products thereof (including lactose)		√		√		√	
Nuts i.e. almond (<i>Amygdalus communis</i> L.), hazelnut (<i>Corylus avellana</i>), walnut (<i>Juglans regia</i>), cashew (<i>Anacardium occidentale</i>), pecan nut (<i>Carya illinoensis</i> (Wangenh.) K. Koch), Brazil nut (<i>Bertholletia excelsa</i>), pistachio nut (<i>Pistacia vera</i>), macadamia nut and Queensland nut (<i>Macadamia ternifolia</i>) and products thereof		√	√			√	As above
Celery and products thereof		√	√			√	Spices
Mustard and products thereof		√	√			√	Spices
Sesame seeds and products thereof		√	√			√	In za'atar
Sulphur dioxide and sulphites at concentrations of more than 10mg/kg or 10mg/litre expressed as SO ₂		√		√		√	
Lupin and products thereof		√		√		√	
Mollusc and products thereof		√		√		√	
Has the product been processed on any equipment where materials identified above are used		√		√		√	
Has any processing aids used in preparation of the product, either contains, or has been produced with the aid of any materials identified above (example: fish gelatine used as an agent in juice clarification)		√		√		√	
Has the product been subjected to any ionising irradiation		√		√		√	
Have you made the necessary enquiries throughout the supply chain	√		√		√		

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Intolerance information

Intolerance information	Does the product contain?		Present on site?		Cross contamination possible?		Comment
	YES	NO	YES	NO	YES	NO	
Animal products		√		√		√	
Antioxidants – added		√		√		√	
Aspartame		√		√		√	
Benzoates/benzoic acid		√		√		√	
Butylated hydroxyanisole (BHA) or B. hydroxytoluene (BHT)		√		√		√	
Cocoa		√	√			√	Hot chocolates
Coconut/oils		√		√		√	
Colours - added		√		√		√	
Corn or derivatives there of		√		√		√	
Flavours – added		√		√		√	
Garlic		√	√			√	Spice
Gelatine		√		√		√	
Glutamates		√		√		√	
Honey		√		√		√	
Hydrolysed vegetable protein/oil		√		√		√	
Hydrocarbons mineral		√		√		√	
Legumes – peas/beans		√		√		√	
Maize or derivative there of		√		√		√	
Polyols		√		√		√	
Preservatives – added		√		√		√	
Salt, added		√	√			√	Salt & blends
Seeds – cotton seed/poppy		√	√			√	Poppy seeds
Seed oils		√		√		√	
Sugar, added		√	√			√	Sugar & blends
Sweeteners - added		√		√		√	
Yeast/yeast extract or derivatives there of		√		√		√	

Suitable/Certified for	Suitable		Certified	
	YES	NO	YES	NO
Halaal	√			√
Kosher	√		√	
Vegetarians (in particular, gelatine is not used in processing)	√			√
Ovo-lacto vegetarians	√			√
Vegans (in particular, neither shellac nor beeswax has been used)	√			√
Coeliacs	√			√
Diabetics	√			√

