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PRODUCT SPECIFICATION

RAW MATERIAL:	IQF Water Chestnuts Sliced	SUPPLIER REFERENCE & NAME :	N/A
		FRUCOM REFERENCE:	N/A
PRODUCT DESCRIPTION:	White to yellowish color that is characteristic of properly processed water chestnuts	LEGAL NAME:	Water chestnuts
		COUNTRY OF ORIGIN:	Thailand
SIZE (PURE, WHOLE, CUT, ETC.)	Sliced	WEIGHT:	10kgs/ctn


SUPPLIER NAME & ADDRESS:	Tel:	+44(0)1628947990
Frucom Foods Limited, 25-28 Queen Anne House, Broadway, Maidenhead, SL6 1LY, UK	Fax:	+44(0)1628947991
	E-mail:	info@frucom.co.uk

TECHNICAL CONTACT NAME:	Kathy Wanis Tel: +44(0)1628947990 kathy@frucom.co.uk	Position:	Technical Manager
OUT OF HOURS CONTACT:	Rob Dukes Tel: +44(0)7771994993 robdukes@frucom.co.uk	Position:	Director



INGREDIENT DECLARATION (in descending order by weight as supplied)


NB: This must include any additives (Name & E Number) etc. used as processing aids, and breakdown of compound ingredients

INGREDIENT NAME	%	SUPPLIER NAME	AGENT (A) OR MANUF. (M)	SOURCE	COUNTRY OF ORIGIN
Water Chestnuts	100				Thailand

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RAW MATERIAL PHOTOGRAPHIC STANDARD – PLEASE INCLUDE ANY DEFECTS AND TOLERANCES

	STANDARD	UNACCEPTABLE (State Reject Limits)
Appearance	White to yellowish colour irregularly round sliced water chestnuts.	Dark brown, discoloured water chestnuts. Size outside of agreed tolerances. Visible skin and brown blemishes outside of agreed tolerances, Over 10%.
Aroma	Has the typical aroma of water chestnuts	rare perfume / off aromas
Flavour	Has the typical flavour of water chestnuts	off flavour
Texture (frozen / not frozen not acceptable)	Slightly crisp and tender	paste after thaw / excessively tough
Dimensions / Size Piece (Length, Width, Height) where applicable, e.g. cubed chicken	Thickness:4-6mm Diameter:19-38mm	10% broken and under/over size
Colour (State standard, e.g. Pantone, RHS, etc.)	white with brown bits	Dark brown / Black
Photographic standard (if applicable) - please add as many visual references as possible, for all testing parameters		 Photo for rejected product

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PHYSICAL CHARACTERISTICS

TEST	MINIMUM	TARGET	MAXIMUM	COMMENTS
Severe Blemish (black, dark brown, or any extremely noticeable rot, pathological damage, injury, discoloration, unpeeled inner skin or unpeeled outer skin generally >6mm and greater in diameter)	nil	3 units/1000g	5 units/1000g	
Major Blemish (black, dark brown, or any extremely noticeable rot, pathological damage, injury, discoloration, unpeeled inner skin or unpeeled outer skin generally 2~6mm in diam)	nil	5 units/1000g	8 units/1000g	
Minor Blemish (black, dark brown, or any extremely noticeable rot, pathological damage, injury, discoloration, unpeeled inner skin or unpeeled outer skin generally <2mm in diameter)	nil	3 units/1000g	5 units/1000g	
Defects units with readily noticeable light pink or purple spots	nil	8% by weight	10% by weight	Sample size:1000g
Clumps (4 or more units frozen together)	nil	3% by weight	5% by weight	Sample size:1000g
Broken pieces (L<10mm)	nil	8% by weight	10% by weight	Sample size:1000g
Extraneous Vegetables Material - Any harmless vegetable material from the parent plant.	None	None	1 Piece	Sample size:1000g
Extraneous Foreign Vegetables Material - Any harmless vegetable material not from the parent plant.	None	None	None	
Foreign Material (glass, metal, wood, stones, rubber, etc.)	None	None	None	
Diameter	17mm	19-38mm	40mm	


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PACKAGING			
	PRIMARY	SECONDARY	TERTIARY
Description:	bag	Export standard carton with blue poly-liners	Cling Film
Material:	PE	Paper for carton, food grade quality PP plastic for poly-liners	
Dimension/ Size:	420x300x400mm	425x270x200mm	
Microns / Gauge:	45microns	4mm	
Packaging Weight	100g	300g	
Details of Closure Method	Folded bag with enough length for IML to tie the bag prior to entering High Care Area	Sealed by a blue tape	
Pack condition: e.g Vac pack (if so please give levels)	Parking temp between 0-5°C.		
Net Weight of Product	10kg		
Total weight of the box	10kg plus packaging		

PRODUCT DELIVERY & SHELF LIFE	
Temperature on delivery:	Below <-18°C
Storage temperature:	Below <-18°C
Storage temperature after opening:	Below <-18°C
Maximum Life:	730 days (24 months) at -18 °C
Minimum Life on delivery:	-
Life after opening & defrost time if applicable:	-
Shelf Life after Opening (days) - Defrosted	'2 Days after thawing if stored below 5c
EC Number (If applicable)	-


MICROBIOLOGICAL STANDARDS (Please detail all tests conducted on the material)

TEST	METHOD	FREQUENCY	TARGET	ACCEPTABLE	UNACCEPTABLE
Aerobic Colony Count	GB 4789.2-2010	Each Batch	< 1*10 ⁶ cfu / g	< 1*10 ⁶ cfu / g	> 1*10 ⁶ cfu / g
Coliforms	GB 4789.3-2010	Each Batch	< 1*10 ² cfu / g	< 1*10 ² cfu / g	> 1*10 ² cfu / g
Mould & Yeast	GB 4789.15-2010	Each Batch	< 3x10 ³ cfu / g	< 3x10 ³ cfu / g	> 3x10 ³ cfu / g
S.aureus / 25 g	GB 4789.10-2010	Each Batch	<10 cfu/g	<10cfu/g	>10cfu/g


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Salmonella / 25 g	GB 4789.4-2010	Each Batch	Absent in 25g	Absent in 25g	Present in 25g
Listeria	GB 4789.4-2010	Each Batch	Absent in 25g	Absent in 25g	Present in 25g
E-Coli	GB 4789.3-2010	Each Batch	<10 cfu/g	<10cfu/g	>10cfu/g
LABORATORY USED		SINO			
ACCREDITATION STATUS		ISO 17025			

NUTRITIONAL COMPOSITION			
NUTRIENT:	TYPICAL VALUE (/100g)	METHOD OF CALCULATION	
ENERGY (kJ)	97	Finding database	
ENERGY (kcal)	406	Finding database	
PROTEIN (g)	1.4	Finding database	
AVAILABLE CARBOHYDRATE (g)	23.9	Finding database	
OF WHICH SUGARS (g)	4.8	Finding database	
OF WHICH STARCH (g)	~	Finding database	
FAT (g)	0.1	Finding database	
OF WHICH SATURATES (g)	0	Finding database	
OF WHICH MONOUNSATURATES (g)	0	Finding database	
OF WHICH POLYUNSATURATES (g)	0	Finding database	
OF WHICH TRANS- FATTY ACIDS (mg)	0	Finding database	
DIETARY FIBRE (AOAC) (g)	3.0	Finding database	
DIETARY FIBRE (ENGLYST) (g)	3.0	Finding database	
SODIUM (mg)	14.0	Finding database	
CHOLESTEROL (mg)	0	Finding database	
ADDED SUGAR (g)	0	Finding database	
ADDED SALT (g)	0	Finding database	
TOTAL SALT (g)	-	Finding database	
ALCOHOL (g)	0	Finding database	
SOURCE OF DATA (FOR THEORETICAL DATA)	USDA		
LABORATORY DETAILS (FOR ANALYTICAL DATA)	-	CERTIFICATED TO ISO17025?	-
FREQUENCY OF ANALYSIS	-	IF NO, OTHER CERTIFICATION	-


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DOES THIS PRODUCT CONTAIN:		
	YES / NO	IF YES PLEASE STATE SOURCE AND FUNCTION
Colours- artificial	NO	
Colours- natural	NO	
Colours- nature identical	NO	
Azo and coal tar dyes	NO	
Added salt	NO	
Salt substitute (Potassium chloride)	NO	
Added sugar	NO	
Fructose	NO	
Galactose	NO	
Artificial sweeteners (polyols)	NO	
Aspartame	NO	
Added flavours	NO	
Artificial flavours	NO	
Nature Identical Flavours	NO	
Flavour enhancers	NO	
Glutamates	NO	
Mono Sodium Glutamate (MSG – E621)	NO	
Artificial preservatives	NO	
Artificial antioxidants	NO	
Added enzymes	NO	
Alcohols	NO	
Sorbates	NO	
Source of phenylalanine	NO	
Caramel	NO	
Caffeine	NO	
Cocoa and derivatives	NO	
Histamines	NO	
Stabilisers	NO	
Animal fats and derivatives	NO	
Beef and beef products (non UK -state source)	NO	
Beef and beef products (UK source)	NO	
BST and other veterinary issues	NO	
Chicken and chicken products (state source)	NO	
Duck and duck products (state source)	NO	
Gelatine	NO	
Gums	NO	
Lamb and lamb products (state source)	NO	
Materials derived from animals fed on GMO feed	NO	


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Mechanically recovered meat (MRM)	NO				
Offal	NO				
Pork and pork products (state source)	NO				
Turkey and turkey products (state source)	NO				
Hydrolysed vegetable protein (HVP)	NO				
Legumes/pulses	NO				
Textured vegetable protein (TVP)	NO				
Hydrogenated vegetable oils	NO				
Refined peanut / ground nut oil	NO				
Refined seed oil (state which)	NO				
Added yeast and yeast extract	NO				
Irradiated food	NO				
Palm Oil	NO				
If yes to Palm oil complete table below					
	Level of supply chain certification				
	IP	SG	MB	Green Palm	None
Palm Oil					
Palm Olein					
Palm Stearin					
Palm Oil Derivatives					
Palm Kernel/Oil Fractions					
Pal Kernel Derivatives					
Non-palm Components					
Total (Must equal 100%)					


DOES THE PRODUCT CONTAIN THE FOLLOWING ALLERGENS?	YES / NO	NAMED ALLERGEN NOT IN PRODUCT BUT USED ON MANUFACTURING LINE / SITE YES / NO	IF USED WHAT MEASURES / CONTROLS ARE IN PLACE TO PREVENT CROSS CONTAMINATION
Cereals containing gluten and their products (Including wheat, rye, barley, oats, spelt, bulgar, couscous, durum, semolina, triticale, kamut. Flour – where a derivative of the grains listed above. Rusk - where a derivative of the grains listed above. Starch - where a derivative of the grains listed above. Malt, malted milk, malt extract/syrup, malt vinegar. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Milk and products thereof (Including – fresh milk, UHT milk, pasteurised milk, condensed milk, evaporated milk, dried milk, cream, cream solids, butter, butter ghee, buttermilk, butter oil,	NO	NO	

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margarine where milk / milk derivative is a constituent, cheese, cheese powder, ice cream, yoghurt, fromage frais, whey/whey powder, curds, quark, lactose, hydrolysed whey powder, hydrolysed whey sugar, whey syrup sweetener, milk solids, trimilk solids, milk proteins, lactalbumin, lactoglobulin, casein / caseinates). *This is not as exhaustive list and is provided for guidance only.			
Eggs and products thereof (Including – egg, dried egg/egg powder, egg albumen/egg white, egg yolk, frozen egg, egg protein, lecithin where a derivative of egg, globulin, livetin, ovalbumin, ovoglobulin, ovomucin, ovomucoid, ovovitellin, vitellin, Quorn™ (contains rehydrated egg white)). *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Soybean and products thereof (Including – soybean curd/tofu, soybean fibre, soybean flour/grits, soybean milk, soybean oil, soybean paste/miso, soybean protein – including soybean protein isolate, textured soybean protein. Soybean sauce/tamari, soybean sprouts, tempe/tempeh, soybean based additives/emulsifiers/flavourings/stabilisers, hydrolysed plant protein where a derivative of soybean, hydrolysed vegetable protein and textured vegetable protein where a derivative of soybean, vegetable oils where soybean oil is a constituent, vitamin E where a derivative of soybean. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Peanuts and products thereof (Including – artificial nuts, goober nuts/goober peas, mandelona nuts, mixed nuts, monkey nuts, peanut butter, peanut extracts, peanut fats, peanut flour, peanut oil, vegetable oil where peanut oil is a constituent, nut pastes/marzipan where peanut/peanut derivative is a constituent, praline where peanut/peanut derivative is a constituent, hydrolysed peanut protein, hydrolysed vegetable protein where a derivative of a peanut, lecithin. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Tree nuts and products thereof (Including – almonds, brazils, cashews, chestnuts, hazelnuts/filberts, macadamias/queensland nuts, pecans, pine nuts/pinon/pignolia, pistachios, and walnuts. Potential derivatives include – nut butter, praline,	NO	NO	

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marzipan, frangipane, nut essences and flavourings, nut oils and dressings, some brands of Worcester sauce contain walnuts. *This is not as exhaustive list and is provided for guidance only.			
Sesame seeds and products thereof. (Including - sesame seeds, sesame seed oil, vegetable oil where sesame seed oil is a constituent, sesamol, sesamin, tahini, humus, halva, furikake and gomashino. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Sulphur dioxide and sulphites in concentrations of more than 10mg/kg. (Including – E220 sulphur dioxide, E221 sodium sulphite, E222 sodium hydrogen sulphite, E223 sodium metabisulphite, E224 potassium metabisulphite, E226 calcium sulphite, E227 calcium hydrogen sulphite, E228 potassium hydrogen sulphite. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Fish and products thereof. (Including – finfish (all species), surumi/kamaboko/sushimi, fish oils, fish roe/caviar, fish stock, fish sauce, Worcester sauce where fish/fish derivative is a constituent, taurine, inosinate, vitamins A, B2 and D where a derivative of fish, sodium-5-inosinate, Caesar dressing, gentlemens relish, fish gelatine, fish glycerides, aspic where fish/fish derivative is a constituent, omega 3. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Crustaceans and products thereof. (Including – barnacles, crab, crawfish, crayfish, langouste/langoustine, lobster, prawns, scampi, shrimps, fish stock where crustacean derivative is a constituent, chitin, chitosan. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Mustard and products thereof. (Including – mustard flour, mustard extract, mustard oil, mustard husk, mustard mucilage, mustard seeds, mustard powder. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Celery / celeriac and products thereof. (Including – celery/celeriac seed, celery/celeriac extract, celery/celeriac juice, celery/celeriac leaf.	NO	NO	

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*This is not as exhaustive list and is provided for guidance only.			
Molluscs and products thereof. (Including – abalone, clams, cockles, mussels, oysters, scallops, whelks, winkles, cuttlefish, octopus, squid, squid ink. *This is not as exhaustive list and is provided for guidance only.	NO	NO	
Lupins and products thereof.	NO	NO	

DIETARY REQUIREMENTS		
IS THE PRODUCT SUITABLE FOR:	YES / NO	
Coeliac	YES	
Vegans	YES	
Vegetarians	YES	
Kosher	YES – NOT CERTIFIED	
Halal	YES - NOT CERTIFIED	
Organic	NO	
GENETICALLY MODIFIED ORGANISMS	YES/ NO	DETAILS IF YES
Does the raw material or any of its ingredients contain any genetically modified material?	NO	
Is the product or any of its ingredients produced from, but not containing any genetically modified material?	NO	
Have genetically modified organisms being used to produce, either directly or indirectly, processing aids, or additives, or any of its ingredients?	NO	
Does the product contain soya/ maize or derivatives which are derived from an Identity Preserved source?	NO	
Is the ingredient covered under the Exova valid-IT system on the non-GM or spices list?	NO	
Is the ingredient covered under the Marks & Spencer Specified GM Risk (SGMR) Ingredients?	NO	

PESTICIDES RESIDUES	
Scope of Test – Pesticides	EU/UK limits
Frequency of Testing	Each batch of goods

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HEAVY METALS				
ELEMENT	UNIT	SPECIFICATION/ MAXIMUM LEVEL	FREQUENCY OF TESTING	TEST METHOD
Lead	mg/kg	0.1	Each container	SN/T 0448-2011; SA/SOP/ME TH/446 V2.6
Cadmium	mg/kg	0.05	Each container	
Arsenic	mg/kg	0.5	Each container	
Mercury	mg/kg	0.01	Each container	

HACCP Flow Chart (including flow chart and CCPs list)

Raw Material → Peeling → Cutting → Blanching → Cleaning → Frozen → Packing → Through Metal Detector


CCP1: RAW MATERIAL

CCP2: BLANCHING

CCP3: METAL DETECTOR

FOOD SAFETY & PROCESS CONTROL

PROCESS	YES/ NO	IF 'YES' INCLUDE TEMP/TIME COMBINATIONS, SENSITIVITY ETC IF NOT COVERED BY HACCP*
Heat Treated/Processed?	yes	98°C ; 240s
Method of heat treatment		blanching
Please detail microbial reduction target used to validate this system		
Please state Certifying body and frequency of validation		each batch
Cooling Process	<10°C	2-5°C; 2-3min, cold water

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Chlorination (Levels and Type in Wash Water e.g. 20 ppm Chlorine Dioxide)	No	Product is blanched
Irradiation	nil	
Ethylene Oxide	nil	
Bleaching	nil	
Other fumigants (please specify)	nil	
Smoking - please specify methodology eg cld smoked over oak wood chips	nil	
Slow vat controls for fermented dairy products	nil	
Other: Please Give Details	~	

NUT POLICY


Please detail the nut and seed policy for the manufacturing line/ site where this ingredient is produced (please specify if nuts/ seeds are handled on site (as a product, ingredient, processing aid), and the cross- contamination controls in place

Nut free site

Authorisation

1. By signing below you are agreeing that all contained within this specification is correct at the time of completion.
2. There shall be no deviation from this specification without prior agreement with the Technical Department at Frucom Limited
6. In signing you are confirming the product and packaging apply with all applicable UK and EC Legislation.

SIGNATURE ON BEHALF OF THE SUPPLIER	DATE
	01/10/2021
SIGNATURE ON BEHALF OF FRUCOM LIMITED	DATE
Kathy Wanis Technical Manager	01/10/2021
SIGNATURE ON BEHALF OF THE CUSTOMER	DATE

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SPECIFICATION AMENDMENT HISTORY		
VERSION	DATE	DESCRIPTION OF AMENDMENT(S)