	<h1>Product Specification</h1>	Code: RC-005
		Version: 5
		Date: 03.12.15

## FREEWORLD TRADING LIMITED

This specification remain the intellectual property of Freeworld Trading and may not be copied or used elsewhere without our written permission.

PRODUCT DESCRIPTION:	Pumpkin Seeds, Micro Controlled
FWT CODE:	0550
DATE ISSUED:	20.04.2018
REVISION NUMBER:	5

SUPPLIER NAME:	Freeworld Trading Limited
SUPPLIER ADDRESS:	21 Annandale Street Edinburgh EH7 4AW
TELEPHONE NUMBER:	0131 557 5600
FACSIMILE NUMBER:	0131 557 5665
EMAIL ADDRESS:	<a href="mailto:quality_control@freeworld-trading.co.uk">quality_control@freeworld-trading.co.uk</a> <a href="mailto:sales@freeworld-trading.co.uk">sales@freeworld-trading.co.uk</a> <a href="mailto:logistics@freeworld-trading.co.uk">logistics@freeworld-trading.co.uk</a>

CONTACT TECHNICAL:	Karen Greenhorn
POSITION HELD:	Quality Control
EMAIL ADDRESS	karen@freeworld-trading.co.uk

Commodity Buyer	Alex Poole
Email Address	alex@freeworld-trading.co.uk

Prepared by: Shelby Bodily	Approved by: Marcela Graziano	Page 1 of 9



# Product Specification

Code: RC-005

Version: 5

Date: 03.12.15

## 1.00 PRODUCT DESCRIPTION

Please provide a brief description of the PRODUCT including, name of product and pack size.

Chinese pumpkin seeds packed into 25kg bags

## 2.00 INGREDIENT BREAKDOWN

Ingredient	% at Recipe bowl stage	% in Final Product	% Compound Ingredient Breakdown	Variety/Grade	Country of Origin
Pumpkin seeds		100%		Variety: GWS or Shineskin Grade: AA or A	China

## 3.00 STABILITY CONTROL FOR RAW INGREDIENTS

Ingredient	'State' eg. Liquid / powder / paste	Max life - days	Storage temp. °C	Washing process. Detail chemical used, concentration and contact time	Aw	pH	% moisture	Heat process time & CORE temperature	Status of manufacturing areas e.g GMP, High Care, High Risk
Details for each individual component of raw material									
Pumpkin Seeds	Solid	365	<25	n/a	<5 0.	-	<8%	80-105C for 30-36 min	GMP


## 4.00 PRESERVATIVES AND PROCESSING AIDS

E. Number	Name	Maximum Limit
	N/A	

If processing aid state which process it aids and how.

## 5.00 SEASONAL VARIATION

None

	<h1>Product Specification</h1>	Code: RC-005
		Version: 5
		Date: 03.12.15

## 6.00 GENETIC MODIFICATION

GENETICALLY MODIFIED ORGANISMS	YES	NO	IF YES WHICH INGREDIENT
1. Does the product or any of its ingredients contain any genetically modified material – whether viable or not?		√	
2. Is the product or any of its ingredients produced from, but not containing, any genetically modified material – whether viable?		√	
3. Has the product or any of its ingredients been significantly changed as a consequence of the use of genetic modification?		√	
4. Have genetically modified organisms been used as processing aids or additives to produce processing aids or additives used in conjunction with the production of the food or any of its ingredients?		√	

## 7.00 ORGANOLEPTIC PROPERTIES

Provide a full description of the organoleptic properties of the PRODUCT.	
Appearance:	Grade AA Shine skin: Variety: uniform light green flat oval seeds pointed at one end rounded at the other Grade A Shine skin Variety: variable greenish/yellow colour flat oval seeds pointed at one end, rounded at the other. Grade AA GWS variety: dark green flat oval seeds pointed at one end, rounded at the other Grade A GWS Variety: variable dark green flat oval seeds pointed at one end, rounded at the other
Flavour and Aroma:	Clean fresh and nutty taste typical of pumpkin seeds. Free from any taint or off flavour
Texture:	Fresh and firm

**Organoleptic properties are obviously dependent on the crop and harvesting conditions of the current year.**



# Product Specification

Code: RC-005

Version: 5

Date: 03.12.15

## 8.00 NUTRITIONAL INFORMATION

Parameter	Value (per 100grams)	Source
Energy Kj / kcal	2596/620	USDA (modified by Regulation (EU) No 1169/2011)
Fats	49.05	
Of which:	-	
-saturated	8.659	
-monounsaturated	16.242	
-polyunsaturated	20.976	
Carbohydrates	10.71	
Of which:	-	
-sugars	1.40	
-polyols		
-starch	1.47	
Fibre	6.0	
Protein	30.23	
Minerals		
Salt (g)	0.018	
Calcium (mg)	46	
Iron (mg)	8.82	
Magnesium (mg)	592	
Phosphorus (mg)	1233	
Potassium (mg)	809	


## 9.00 PRODUCT SUITABILITY

Dietary Requirement	Yes/No	Comments
Coeliac	Yes	There is no gluten within the product recipe; there is no gluten on the production line. However we can not guarantee that the raw materials entering the factory are gluten free. We have taken every reasonable precaution and proceeded with due diligence, however we cannot guarantee cross contamination on vehicles/containers etc.
Vegetarians	Yes	There are no animal products within the product recipe; there are no animal products on the production line. We have taken every reasonable precaution and proceeded with due diligence, however we cannot guarantee cross contamination on vehicles/containers etc.
Vegans	Yes	There are no animal products within the product recipe; there are no animal products on the production line. We have taken every reasonable precaution and proceeded with due diligence, however we cannot guarantee cross contamination on vehicles/containers etc.
Lactose Intolerant	Yes	There are no dairy products within the product recipe; there are no dairy products on the production line. We have taken every reasonable precaution and proceeded with due diligence, however we cannot guarantee cross contamination on vehicles/containers etc.
Kosher	Yes	Certified Yes
Halal	Yes	Certified Yes

Prepared by: Shelby Bodily

Approved by: Marcela Graziano

Page 4 of 9

	<h1>Product Specification</h1>	Code: RC-005
		Version: 5
		Date: 03.12.15

## 10.00 ALLERGEN DATA

Product	In the product Y/N	Within the factory Y/N	On the same production line Y/N	Stored in Same Warehouse Y/N
Peanuts and peanut derivatives	No	No	No	If stored, it is in segregated area
Nut and nut derivatives (almond, hazelnut, walnut, cashew, pecan nut, Brazil nut, pistachio nuts, macadamia nut and Queensland nut)	No	Yes	No	In segregated area
Sesame seeds / sesame seed derivatives	No	Yes	No	In segregated area
Mustard / mustard products	No	No	No	No
Milk / milk derivatives	No	No	No	No
Egg / egg derivatives / albumen	No	No	No	No
Gluten (i.e wheat, rye, barley, oats, spelt, kamut, or their hybrid strains)	No	No	No	If stored, it is in segregated area
Soya / Soya derivatives	No	No	No	If stored, it is in segregated area
Lupin / Lupin derivatives	No	No	No	No
Fish/Fish derivatives	No	No	No	No
Crustaceans	No	No	No	No
Molluscs	No	No	No	No
Sulphur Dioxide and sulphites	No	No	No	In segregated area
Celery	No	No	No	No

Allergens stored in the warehouse can be subject to change from the above list. However, the warehouses take all necessary precautions and store all allergens in segregated areas. We have taken every reasonable precaution and proceeded with due diligence, however, we cannot control the risk of cross contamination in distribution, since we have limited control over the third party service involved. Therefore, we cannot guarantee absence of any particular allergen. Should you wish to make any allergen statements against your products please contact Freeworld Trading before hand.

Prepared by: Shelby Bodily	Approved by: Marcela Graziano	Page 5 of 9



# Product Specification

Code: RC-005

Version: 5

Date: 03.12.15

## 11.00 CHEMICAL ANALYSIS

Parameter	Specification Limits
Moisture	8% max
Free Fatty Acids	Max 2%
Peroxide Value	Max 5 meqO2/kg
Aflatoxin	Total 4ppb, B1 2ppb
Pesticides	As per EU/UK Legislation
Heavy Metals	As per EU/UK legislation

## 12.00 MICROBIOLOGY

Microbes	Typical Levels
Total Viable Count	Max 50,000 cfu/g
Coliforms	Max 100 cfu/g
Escherichia Coli	<10 cfu/g
Yeasts	Max 1000 cfu/g
Moulds	Max 1000 cfu/g
Salmonella	Absent in 25gms

## 13.00 Physical Analysis

Physical attributes	Specification			
	GWS Grade AA Extra Clean	GWS Grade A	Shine skin Grade AA Extra Clean	Shine skin Grade A
Purity	Target 99.99% Tolerance 99.95%	Target 99.99% Tolerance 99.95%	Target 99.99% Tolerance 99.95%	Target 99.9% Tolerance 99.95%
External vegetable matter (including schlerotina)	Target 2 Tolerance 4 <b>pieces/package</b>	Target - Tolerance 0.05%	Target 0 Tolerance 2 <b>Pieces/50lb bag</b>	Target – Tolerance 0.05%
Brokens (broken kernels is any portion less than ½ of the whole kernel)	Target 5% Tolerance 7%	Target 3% Tolerance 5%	Target 5% Tolerance 7%	Target – Tolerance 5%
Foreign matter such as glass, wood, metals, stones, insects (dead or alive)	Free from	Free from	Free from	Free from
Rancid Kernels	Target 0.3% Tolerance 0.5%	Target 0.5% Tolerance 0.7%	Target 0.3% Tolerance 0.5%	Target 0.5% Tolerance 0.8%
Inshells/with shells	Target - Tolerance 1%	Target 1% Tolerance 2%		
Light colour	Target 5% Tolerance 8%	Target 30% Tolerance 50%		

**The heat treatment process involves heating to a core temperature of 80-105C for 30-36minutes**

**Declaration: Although due care and attention has been taken during the processing of this natural product. The product may contain traces of pits/stalks/shell.**



## Product Specification

Code: RC-005

Version: 5

Date: 03.12.15

### 14.00 Count/Size

Size	Approx per 100gms	Please note pumpkin seeds are a natural agricultural product and the counts will vary.
GWS Grade AA	700-1000	
GWS Grade A	700-1000	
Shine skin Grade AA	700-1000	
Shine Skin Grade A	700-1000	

### 15.00 SHELF-LIFE

#### SHELF-LIFE FROM DATE OF PRODUCTION: 12 months

Please note the product will be safe to use for the duration of the shelf-life after opening, providing they have been stored correctly.

### 16.00 METAL DETECTION

Metal detection	Ferrous (mm)	2.0mm
	Non –Ferrous (mm)	2.5mm
	Stainless Steel (mm)	2.5mm

### 17.00 RECOMMENDED STORAGE CRITERIA

All our products are designed for ambient storage, however we choose to keep our products between 6-10°C to preserve maximum freshness and prevent infestation.

<b>COOL STORE</b>	<b>6-8C</b>	
<b>Ambient</b>	<b>Max 20C</b>	
<b>AWAY FROM DIRECT SUNLIGHT</b>	<b>Yes</b>	



## Product Specification

Code: RC-005

Version: 5

Date: 03.12.15

### 18.00 MATERIALS

Recommended pallet stacking for the product, however this may vary depending on warehouse/haulier

PALLET		
No of units per layer		Maximum
No of units per pallet		Maximum
No of units per pallet		Minimum
Method of pallet security		Shrink-wrap / Pallet-wrap / Banding
Type of pallet used		

### CONTACT PACKAGING MATERIAL

Material	Three-layer composite bag( PA+PE, Food grade bag)	Food Grade	YES	<input checked="" type="checkbox"/>	NO	
Colour	blue					
Dimensions	49.5cm x 92cm					
Weight	130	g				
Method of closure	Hot seal	Tape / EEC Tape / Stitching				

### OUTER PACKAGING MATERIAL

Material	Paper bag					
Colour	Brown					
Grade	Food					
Weight	175	G				
Dimensions	50cmx90cm	cm				
Method of closure	Stitching	Tape / EEC Tape / Stitching				

### 19.00 SOURCE AND POINT OF MANUFACTURE

State the country of Manufacture	China					
Is the Product produced and packaged in the suppliers own premises:-	Yes					





## Product Specification

Code: RC-005

Version: 5

Date: 03.12.15

### 20.00 OBLIGATIONS UPON THE PART OF THE SUPPLIER & TRADING TERMS OF FREEWORLD TRADING.

The supplier must comply with all relevant United Kingdom and European Community Legislation and all relevant legal and food safety criteria. The supplier must agree to comply with Freeworld Trading Standard Conditions of Supply.

The supplier is responsible for informing Freeworld Trading in writing and a minimum of one calendar month in advance of any proposed change of formulation, manufacturing process or packaging materials and changes in the origin places of process of any materials used to produce the product to be supplied to Freeworld Trading. No change is to be made without the prior knowledge and prior written agreement of Freeworld Trading.

#### Freeworld Trading Limited

- 1) No claims entertained after 7 days from delivery.
- 2) Any overdue amounts are liable to interest charged at 3% over base rate per month.
- 3) Title and goods remain with Freeworld Trading Ltd. until the purchase price is paid in full'
- 4) The risk in the goods shall pass to the buyer at the time of delivery where carriage is made by independent carrier, then at the time of collection by this carrier. or where the goods are sold ex-warehouse at the time the buyer is notified that the goods are released for collection.
- 5) If the goods or any part of thereof supplied under the contract are processed or altered in any way by the buyer or any other agent, the quality of the goods shall be deemed acceptable by the buyer. In addition all customers quality control checks are to be completed on the entire load prior to use in application

#### FOR AND ON BEHALF OF FREEWORLD TRADING

NAME: (Technical)	Karen Greenhorn
POSITION HELD:	Quality Control
TECHNICAL SIGNATURE	<i>Karen Greenhorn.</i>
DATE:	20.04.2018
Name: (Buyer)	Alex Poole
Signature:	<i>Alex Poole</i>