	Product Specification	Code: RC-005
		Version: 5
		Date: 03.12.15

## FREeworld TRADING LIMITED

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PRODUCT DESCRIPTION:	Pine Nuts ( <i>Pinus koraiensis</i> )
FWT CODE:	0545
DATE ISSUED:	09/03/2016
REVISION NUMBER:	5

SUPPLIER NAME:	Freeworld Trading Limited
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CONTACT TECHNICAL:	Karen Greenhorn
POSITION HELD:	Quality Control
EMAIL ADDRESS	karen@freeworld-trading.co.uk

Commodity Buyer	Ishan Das
Email Address	ishan@freeworld-trading.co.uk

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## 1.00 PRODUCT DESCRIPTION

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

Pine Nut Kernels Grade A (hulled) packed in 25kg cartons (2x12.5kg)

## 2.00 INGREDIENT BREAKDOWN

Ingredient	% at Recipe bowl stage	% in Final Product	% Compound Ingredient Breakdown	Variety/Grade	Country Of Origin
Pine Nut Kernels		100		<i>Pinus Koraiensis</i> / 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									
Pine nuts	Solid	365	Max 16C	n/a			5%		GMP

## 4.00 PRESERVATIVES AND PROCESSING AIDS

E. Number	Name	Maximum Limit
	N/A	

If processing aid state which process it aids and how.

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## 5.00 SEASONAL VARIATION

Natural products are subject to usual fluctuation in their parameters due to regional and/or weather influences. Once collected during September/October the pine nuts progressively become less white in colour. This variation in colour is not a reason for rejection.

## 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: Light beige/ivory kernels

Flavour and Aroma: Typically nutty aroma with no off-flavours. Strong to pleasant taste with no off tastes.

Texture: Firm

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

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8.00 NUTRITIONAL INFORMATION		
Parameter	Value (per 100grams)	Source
Energy Kj / kcal	3014.4/729.81	USDA release 28 (modified by Regulation (EU) No 1169/2011)
Fats	68.37	
Of which:	-	
-saturated	4.89	
-monounsaturated	18.76	
-polyunsaturated	34.01	
Carbohydrates	13.08	
Of which:	-	
-sugars	3.59	
-polyols		
-starch		
Fibre	3.7	
Protein	13.69	
Minerals		
Salt (g)	0.005	
Calcium (mg)	16	
Iron (mg)	5.53	
Magnesium (mg)	251	
Phosphorus (mg)	575	
Potassium (mg)	597	

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 No
Halal	Yes	Certified No

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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 in UK Y/N	Possible traces Y/N
Peanuts and peanut derivatives *	No	No	No	No	Yes
Nut and nut derivatives (almond, hazelnut, walnut, cashew, pecan nut, Brazil nut, pistachio nuts, macadamia nut and Queensland nut)	No	No	No	Yes	Yes
Sesame seeds / sesame seed derivatives	No	No	No	Yes	No
Mustard / mustard products	No	No	No	No	No
Milk / milk derivatives	No	No	No	No	No
Egg / egg derivatives / albumen	No	No	No	No	No
Gluten (i.e wheat, rye, barley, oats, spelt, kamut, or their hybrid strains)	No	No	No	No	No
Soya / Soya derivatives	No	No	No	No	No
Lupin / Lupin derivatives	No	No	No	No	No
Fish/Fish derivatives	No	No	No	No	No
Crustaceans	No	No	No	No	No
Molluscs	No	No	No	No	No
Sulphur Dioxide and sulphites	No	No	No	Yes	No
Celery	No	No	No	No	No

**\*As pine nut kernels are wild collected and the collection conditions are out the control of the exporters, and as Peanut oil is the preferred oil of China, we cannot make a statement as to the presence of peanut traces.**

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.

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11.00 CHEMICAL ANALYSIS	
Parameter	Specification Limits
Moisture	Max 5% vacuum oven method
Aflatoxin	Total 4ppb, B1 2ppb
Pesticides	Tested at least annually as per EU regulations


12.00 MICROBIOLOGY	
Microbes	Typical Levels
Total Viable Count	Max 500,000 cfu/g
Enteros	Max 50,000 cfu/g
Escherichia Coli	Max 100 cfu/g
Yeasts	Max 50,000 cfu/g
Moulds	Max 50,000 cfu/g
Salmonella	Absent in 25gms

13.00 PHYSICAL ANALYSIS	
Physical attributes	Specification
Purity	99.9%
Extraneous Vegetable Matter	0.1%
Hair	0.025%
Infestation	Free from
Shell debris or in-shell	0.025%
<b>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.</b>	

14.00 COUNT/SIZE		
Size	Per 100g Upper	
600	600	
650	650	
750	750	
950	950	
1400	1400	

15.00 SHELF-LIFE
<b>SHELF-LIFE FROM DATE OF PRODUCTION: 12 months</b>
Please note the product will be safe to use for the duration of the shelf-life after opening, providing they have been stored correctly.

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## 16.00 METAL DETECTION

Metal detection	Ferrous (mm)	0.7mm – 4mm
	Non –Ferrous (mm)	0.7mm – 8mm
	Stainless Steel (mm)	0.7mm – 2.0mm

## 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>6-10C</b>	
<b>Ambient</b>	<b>Max 16C</b>	
<b>AWAY FROM DIRECT SUNLIGHT AND/OR OTHER HEAT SOURCES</b>	<b>Yes</b>	

## 18.00 MATERIALS

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

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

## CONTACT PACKAGING MATERIAL

Material	PE/PP foil bags	Food Grade	YES	✓	NO
Colour	Transparent or (sometimes vacuum packed)				
Dimensions	~ 500x800				
Weight	~ 60	g			
Method of closure	Hot Sealed/vacuum packed	Tape / EEC Tape			


## OUTER PACKAGING MATERIAL

Material	Cardboard				
Colour	Brown or white				
Grade	Food				
Weight	~800	G			
Dimensions	~ 490x250x360	Mm			
Method of closure	Tape	Tape / EEC Tape			

## 19.00 SOURCE AND POINT OF MANUFACTURE

State the country of Manufacture	China
Is the Product produced and packaged in the suppliers own premises:-	No

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## 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:	14.03.2016
Name: (Buyer)	Ishan Das
Signature:	<i>[Signature]</i>

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