



Kluman and Balter Limited

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Product Specification

Product	: Pumpkin Seed		
Size / weight	: 25 kg		
K & B Code	: 509030		
Date	: 07.05.14	Issue No.:	8
Reason for Issue	: Reviewed		

1. Product Description: Flat ovoid seeds, mid green in colour with a nutty, slightly vegetal flavour. Pumpkin Seeds are shelled seeds of *Curcubita pepo*.

2. Analytical Standards:

2.1. Chemical:

Parameter	Target Value	Limits	Method / Frequency
Moisture	Max 8 %		Each Batch
Free Fatty Acid	Max 1 % as oleic acid		Each Batch
Aflatoxin B ₁	Max 2 ppb		Once per year
Total Aflatoxin	Max 4 ppb		Once per year

2.2. Physical, including allowable contaminants and levels and organoleptic attributes:

Parameter	Target Value	Limits	Method / Frequency
Organoleptic	As agreed sample		Each Batch
Purity	Min 99.99 %		Each Batch
Damaged, discoloured, attached skin	Max 2.5 %		Each Batch
Loose Skin / dust	Max 0.025 %		Each Batch
EVM	Max 2 per 25 kg		Each Batch
Mudballs	Max 1 per 25 kg		Each Batch
Mineral Stones	Max 1 per 100 kg		Each Batch
Foreign Seeds / Stalks	0.025 % max		
Foreign matter (Wood, plastic, metal, grass)	Absent		

2.3. Microbiological:

Parameter	Target Value	Limits	Method / Frequency
TVC	1 000 000 cfu/g	> 1 000 000 cfu/g	Raw material tested on intake
Coliforms	100 000 cfu/g	> 100 000 cfu/g	Raw material tested on intake Monthly
E.Coli	1 000 cfu/g	> 1 000 cfu/g	Raw material tested on intake Monthly
Salmonella	Absent in 25g	Detected in 25g	Raw material tested on intake Monthly
Yeasts	5 000 cfu/g	> 5 000 cfu/g	Raw material tested on intake Monthly
Moulds	10 000 cfu/g	> 10 000 cfu/g	Raw material tested on intake Monthly

TVC and Coliform count may on occasion exceed stated maximum by 1 log. This is deemed acceptable when E. coli, Staphylococcus aureus, Bacillus cereus and Salmonella achieve stated target.

3. Metal Detection:

Non Ferrous 2.5mm, Ferrous 2.0mm, Stainless Steel mm
Frequency of metal checking metal detector: Hourly

4. Nutrition: (State source of data)

	Per 100g Typical
Energy, Kcals	565
Energy, Kjoules	2363
Protein	24
Fat	44
of which saturates	7.0
of which mono-unsaturates	
of which poly-unsaturates	
Carbohydrate	15g
of which sugars	1.1g
of which starch	3.9g
Sodium	0.02g
Fibre	5.3g

5. Shelf Life:

Shelf life from date of production: 12 months

Minimum life on delivery to Kluman & Balter: 9 months, 3 months after opening, providing tightly re-sealed

6. Storage and Transport Conditions:

6.1. Storage Conditions: Ambient, preferably <20°C

6.2. Transport Conditions: Ambient, preferably <20°C

7. Packaging

7.1 Primary Packaging: (unit of sale)

Dimensions (L x W x H) mm: 535 x 410 x 205mm

Material and closure: Multi-ply paper sacks (Stitched) or Food grade PP bags (Heat sealed)

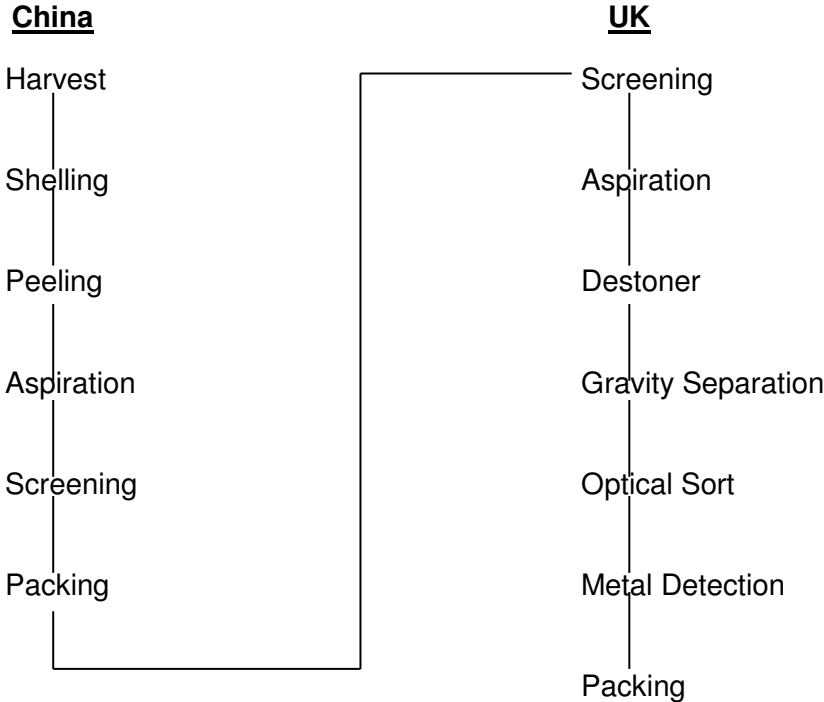
Weight of primary packaging:

Label position: Side face

Label information: Labeling includes product description, net weight and lot number.

Coding information and example:

11. Flow diagram of manufacturing process, showing critical control points:



12. Detail of Critical Control Points

CCP No.	Hazard Identified	Control Procedure	Action	Responsibility
1. Goods in	Contamination with biological materials, e.g. wood, dust, hair	Inspection of delivery on arrival	Hold delivery	QC Staff
2. Magnet	Contamination by metal from machine	Magnets will remove ferrous metal contamination	Monitor magnet outsorts	QC Staff
3. Pre-suction unit	Contamination by light vegetable material, such as chaff, leaf etc	Pre-cleaner	Adjust to give good removal of debris	Production Staff
4. Screens	Contamination by coarse waste and broken kernals	Cleaner, ensuring correct sieves are in place	Change sieves to give good removal of debris	Production Staff
5. After suction unit	Contamination by impurities such as thin and empty kernals	Cleaner	Hold and re-process. Alter operating characteristics	Production Staff
6. De-stoner	Contamination by stones	Cleaner set to remove stones	Clean machine. Check for total removal of stones	Production Staff
7. Picking table	Contamination by any other foreign material	Sorting belt	Check for foreign material outsorts	Production Staff
8. Magnets	Contamination by metal from machine	Magnets will remove ferrous metal contamination	Monitor magnet outsorts	QC Staff
9. Storage	Pest infestation	Pest control contract and inspections	Monitor for infestation and	Technical staff & pest control contractor.

13. Food Intolerance Data:

The product is **FREE** from the following:

Component	Y / N	Detail including origin
Nuts & Nut derivatives (including tree nuts) (and any possible sources of cross contamination)	Y	
Peanuts & Peanut Derivatives	Y	
Seeds (Poppy, Sesame, Sunflower) & Seed Derivatives	N	Pumpkin Seeds
Egg & Egg Derivatives	Y	
Milk & Milk Derivatives	Y	
Lactose	Y	
Wheat and Wheat Derivatives	Y	
Modified Starches	Y	
Mustard, mustard seeds, celery, celeriac, kiwi fruit	Y	
Lupin Seed	Y	
Gluten and Gluten Derivatives	Y	
Histamine, Caffeine	Y	
Rye, Barley & Oats or their Derivatives	Y	
Yeast and Yeast Derivatives	Y	
Sulphites and Sulphur Dioxide	Y	
Benzoates	Y	
Artificial Sweeteners	Y	
Antioxidants BHA/BHT	Y	
Azo and Coal Tar Dyes	Y	
Preservatives ; Natural	Y	
Preservatives ; Artificial	Y	
Additives ; Natural	Y	
Additives ; Artificial	Y	
Flavourings: Natural	Y	
Flavourings: Artificial / Nature Identical	Y	
Glutamates, MSG	Y	
Colours: Natural	Y	
Colours: Nature Identical	Y	
Colours: Artificial	Y	
Potassium Based Salt Substitute	Y	
Genetically Modified Ingredients	Y	
Components derived from Maize	Y	
- If No, are they derived from Identity Preserved Source ?		
Or do they have a negative PCR Certificate ?		
Components derived from Soya	Y	
- If No, are they derived from Identity Preserved Source ?		
Or do they have a negative PCR Certificate ?		
Processing Aids derived from G.M.O.	Y	
Beef	Y	
Beef derivatives, stocks, extracts, offals, gelatin, fat, blood	Y	
Pork	Y	
Pork derivatives, stocks, extracts, offals, gelatin, fat, blood	Y	
Lamb	Y	
Lamb derivatives, stocks, extracts, offals, gelatin, fat, blood	Y	
Fish, Crustacians or Molluscs	Y	
Fish, Crustacian or Mollusc derivatives, stocks, extracts, offals, gelatin, fat, blood	Y	
Beef, Pork, Lamb, Fish products or derivatives on site	Y	

14. Diet Suitability:

The product is **SUITABLE** for the following diets:-

Vegetarians	Y	Ovo - Lacto Vegetarians	Y
Vegans	Y	Muslims / Halal certified	N*
Jewish / Kosher	N*	Diabetics	Y
Low Potassium	Y	Coeliacs	Y
Low Sodium	Y	Organic	N

*not certified

15. Warranty:

We warrant that all food products and packaging materials supplied to Kluman & Balter Ltd:

- Shall comply in all respects with this specification, shall be clean, sound, non-injurious to health and shall be fit for the purpose for which they are intended.
- Shall comply with all aspects with the Food Safety Act 1990, and with associated regulations, and with all other relevant United Kingdom and European Union legislation, regulations, standards and codes of practice. Packaging shall comply with legal requirements for Food Contact Materials.
- Shall be of the nature, substance and quality described and shall not be presented in such a way which may mislead the purchaser.
- Shall be stored, stacked, handled and transported under suitable conditions so as to maintain safety and quality at all times.
- Shall be fully traceable back to the place and time of manufacture, and to the ingredients used.
- This specification is based on manufacturer's information, and is believed to be correct. No liability is accepted for errors and omissions. It may be updated or altered from time to time as new information becomes available.
- Customers are advised to determine the suitability of products for their specific application, and to store and use products according to this specification. It will not normally be possible to provide a life extension on products once delivered to customers' premises.
- Customers must notify any damage or defects immediately on arrival.

For and on behalf of Kluman & Balter:		For and on behalf of: (customer)	
Signature:			
Print Name:	Craig Stewart		
Position:	Technical Manager		
Date:			
KB code & Product:	509030 Pumpkin Seed		