



Head Office: The Old Grammar School, 3-7 Market Square, Amersham, Bucks. HP7 ODF  
Tel: (44) 1494 434600 Fax: (44) 1494 434435  
Email: foodnettechnical@foodnet.ltd.uk

## Product Specification

### Shredded Savoy Cabbage

Date: 1<sup>st</sup> May 2017

Page 1 of 10

**PACK SIZE** 1 x 10kg; 1 x 15kg; 4 x 2.5kg

**ORIGIN:** Belgium

**GENERAL** The product shall be prepared from fresh sound raw material that is free from all toxic residues and taints and shall comply with all current UK/EU Food Legislation. The product is intended to be used as ingredient that is further processed and heat-treated before final consumption.

**INGREDIENTS** Savoy Cabbage 100% Declare as: Savoy Cabbage  
(*Brassica oleracea var. sabauda*)

**PROCESSING** Cabbages are mechanically harvested and delivered to the factory. Each load is sampled and assessed for foreign material and physical defects. The load is then cleaned, shredded to a nominal 20mm width, blanched and frozen and filled into bulk palletainers. The frozen cabbage is sampled and assessed against this specification. The palletainers are then labelled and transferred to the cold store, where they are stored at  $-23^{\circ}\text{C}$  until required for packing.

**PACKING** During packing, the cabbage is inspected before weighing and filling into blue poly lined cartons. The cartons are Best Before and Production date coded, check weighed, metal detected, palletised and stretch-wrapped before being returned to store at  $-18^{\circ}\text{C}$  to await despatch to the customer, at  $-18^{\circ}\text{C}$ .

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**QUALITY CONTROL** Checks are carried out on the following: -

Processing: -	Raw material Final Product Peroxidase Temperature
Packing: -	Metal detection Check weighing Final product physical defect levels Organolepsis Case quantity Case sealing Case coding and print quality

**DEFECT TOLERANCES** Product shall be checked at least hourly against the following tolerances for defects: -

<b><u>Per 1000g</u></b>	<b><u>Target</u></b>	<b><u>Maximum</u></b>
Foreign Matter	Nil	Nil
E.V.M.	1	2
Spotted Leaves	3% w/w	5% w/w
Dark Green Leaves	3% w/w	6% w/w
Core	5% w/w	10% w/w
Discoloured Leaves	3% w/w	5% w/w
Fragments (<9mm)	15% w/w	20% w/w

**DEFINITIONS OF DEFECTS****Foreign Material**

This includes any material not derived from the cabbage plant or defined as EVM, such as insects, pieces of insects, wood, glass, stones, metal, toxic berries, snails, slugs or any other material which will render the product unacceptable.

**Extraneous Vegetable Matter (EVM)**

This includes any vegetable matter other than the cabbage leaves which is derived from the cabbage plant or other harmless vegetable material. This does not include pieces of cabbage core which are assessed later.

**Spotted Leaves**

This includes units which have blemished spots through damage by insects or mechanical means.

**Dark Green Leaves**

This includes units which have a dark green/purple colour which can be slightly fibrous.

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**Core**

This refers to pieces of the cabbage core.

**Discoloured Leaves**

This refers to any pieces of leaf which is conspicuously different in colour from the normal colour of the rest of the sample.

**Fragments**

These are pieces of leaf which will pass through a 9mm sieve.

*The below minimum numbers of samples should be inspected and average result to be out-of-spec.*

Quantity Delivered (Kg)	Minimum samples to be taken (1Kg of product per each item)		
	10Kg Boxes	20Kg Bags	25Kg Bags
<1000	4	2	2
<2000	8	5	4
<5000	10	7	5
<10000	15	10	8
≤27000	20	15	12

**ORGANOLEPSIS** (Carried out on a cooked sample.)**COLOUR**

Characteristic yellow to pale green, typical of the variety.

**FLAVOUR**

Characteristic savoy cabbage flavour, shall be slightly sweet.

**TEXTURE**

Tender, firm but not hard, with no stringiness.



Average Sample

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**MICROBIOLOGICAL**

Organism	Target	Maximum
T V C @ 30°C	$1 \times 10^5$	$1.5 \times 10^6$
Total Coliforms	$1 \times 10^3$	$3 \times 10^3$
E. coli	Nil	$1 \times 10^1$
Yeasts	$1 \times 10^3$	$3 \times 10^3$
Moulds	$5 \times 10^2$	$1.5 \times 10^3$
Staph aureus	$1 \times 10^1$	$1 \times 10^3$
Salmonella	Absent in 25g	Absent in 25g
Listeria sp.	Absent in 25g	$1 \times 10^2$

**ANALYTICAL**

Product shall be blanched to give a negative peroxidase reaction (guaiacol test) between 50 and 60 seconds.

**WEIGHT CONTROL**

The product shall be packed to minimum weight.

**METAL DETECTION**

All cartons shall be passed through a metal detector. The system shall be tested at least every 2 hours using ferrous, non-ferrous and stainless steel test pieces.

**BEST BEFORE DATE**

The product shall be twenty four months following the month of packing e.g. if packed in May 2017 then BEST BEFORE END MAY 2019. Minimum BB date on delivery: 3 months.

**TRACEABILITY INFO**

Production date or Lot number printed on the label as well as customer order number and/or delivery date.

**STORAGE  
CONDITIONS**

Keep frozen at - 18°C at all times.

**CARTON LINERS**

Blue food grade polythene liner of a **minimum** thickness of 30µm.

**CARTONS**

Corrugated fibreboard of glued construction, no metal staples to be used. Shall be sealed using blue adhesive tape.

**SACKS**

(1 x 15kg Sacks)

Blue food grade polythene sack of a **minimum** thickness of 110µm.

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**NUTRITIONAL INFORMATION**

This data conforms to the requirements of EC Council Directive 90/496/EEC

100g of uncooked savoy cabbage typically contains: -

Parameter	Value / 100g	Methodology
Energy - kcal	29	McCance & Widdowson 6 <sup>th</sup> Edition
Energy - kJ	120	McCance & Widdowson 6 <sup>th</sup> Edition
Moisture	88.1g	McCance & Widdowson 6 <sup>th</sup> Edition
Carbohydrate	3.7g	McCance & Widdowson 6 <sup>th</sup> Edition
- as sugars	3.6g	McCance & Widdowson 6 <sup>th</sup> Edition
- as polyols	0.0g	McCance & Widdowson 6 <sup>th</sup> Edition
- as starch	0.1g	McCance & Widdowson 6 <sup>th</sup> Edition
Fat	0.5g	McCance & Widdowson 6 <sup>th</sup> Edition
- as saturates	0.1g	McCance & Widdowson 6 <sup>th</sup> Edition
- as mono unsaturates	0.1g	McCance & Widdowson 6 <sup>th</sup> Edition
- as poly unsaturates	0.3g	McCance & Widdowson 6 <sup>th</sup> Edition
Protein	2.1g	McCance & Widdowson 6 <sup>th</sup> Edition
Fibre	3.1g	McCance & Widdowson 6 <sup>th</sup> Edition
Sodium	5mg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin A	10µg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin B6	0.19mg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin B12	0.0mg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin C	62mg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin D	0.0µg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin E	0.2mg	McCance & Widdowson 6 <sup>th</sup> Edition
Thiamin	0.15mg	McCance & Widdowson 6 <sup>th</sup> Edition
Riboflavin	0.03mg	McCance & Widdowson 6 <sup>th</sup> Edition
Niacin	0.7mg	McCance & Widdowson 6 <sup>th</sup> Edition
Folic Acid	150µg	McCance & Widdowson 6 <sup>th</sup> Edition
Biotin	1.1g	McCance & Widdowson 6 <sup>th</sup> Edition
Pantothenic Acid	0.21mg	McCance & Widdowson 6 <sup>th</sup> Edition
Calcium	53mg	McCance & Widdowson 6 <sup>th</sup> Edition
Phosphorus	44mg	McCance & Widdowson 6 <sup>th</sup> Edition
Iron	1.1mg	McCance & Widdowson 6 <sup>th</sup> Edition
Magnesium	7mg	McCance & Widdowson 6 <sup>th</sup> Edition
Zinc	0.3mg	McCance & Widdowson 6 <sup>th</sup> Edition
Iodine	2.0µg	McCance & Widdowson 6 <sup>th</sup> Edition
Potassium	320mg	McCance & Widdowson 6 <sup>th</sup> Edition

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**GMO DECLARATION**

Does the product, or any of its ingredients contain any genetically modified material (whether viable or not)? ~~YES~~ / NO

Is the product or any of its ingredients not substantially equivalent as a consequence of the use of genetic modification? ~~YES~~ / NO


Is the product or any of its ingredients produced from, but not containing any genetically modified material? ~~YES~~ / NO

Have genetically modified organisms been used as processing aids or additives used in connection with the production of the food or any of its ingredients? ~~YES~~ / NO

Have genetically modified organisms been used to produce processing aids or additives but where such genetically modified organisms are not present in the processing aid as used in connection with the production of the food or any of its ingredients? ~~YES~~ / NO

Name: Gianluca Oberto


Job Title: Technical Manager

Signature: Date: 1<sup>st</sup> May 2017**IRRADIATION POLICY**

I confirm that the product supplied by Foodnet Limited under this specification has not undergone any irradiation treatment or process. I further confirm that no ingredient or processing aid used in conjunction with this product has undergone irradiation treatment.

Name: Gianluca Oberto

Job Title: Technical Manager

Signature: Date: 1<sup>st</sup> May 2017

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**FOOD INTOLERANCE**

<b>Food Intolerance Data</b>		
Does the material supplied contain any of the following? (NO) Absent, (YES) Present		
<b>Allergen</b>	<b>NO / YES</b>	<b>Reason for presence if YES</b>
Milk & Milk Derivatives	NO	
Egg & Egg Derivatives	NO	
Animal Products (*)	NO	
Fish/Shellfish/Crustations/Molluscs	NO	
Cereals (**)	NO	
Gluten	NO	
Yeast/Yeast Extract	NO	
Soya/Soya Derivatives	NO	
Fruit & Fruit Derivatives	NO	
Beef & Beef Products	NO	
Pork & Pork Products	NO	
Lamb & Lamb Products	NO	
Poultry & Poultry Products	NO	
Legumes	NO	
Peanuts	NO	
Sulphite >10ppm	NO	
MSG	NO	
BHA / BHT	NO	
Benzoates	NO	
Glutamates	NO	
Azo & Coal Tar Dyes	NO	
Added Colour	NO	
Added Flavour	NO	
Preservatives	NO	
Antioxidants	NO	
Added Salt	NO	
Nuts/Nut Oils	NO	
Caffeine	NO	
Sesame Products	NO	
Garlic	NO	
Poppy Seeds	NO	
Mustard	NO	
Celery/Celariac	NO	
Lupins	NO	
*Including any product derived from slaughtered animals, e.g. gelatine, rennet		
**Including wheat, corn, barley, rye, oats, etc.		
Is the material suitable for:		
Vegetarians? Y / <del>N</del> Halal? Y / <del>N</del> (Not Certified)      Organic? <del>Y</del> / N		
Vegans? Y / <del>N</del> Kosher? Y / <del>N</del> (Not Certified)		
<b><u>Please be aware the manufacturing sites we supply this item from may handle allergens in production. Procedures are in place to prevent cross-contamination.</u></b>		

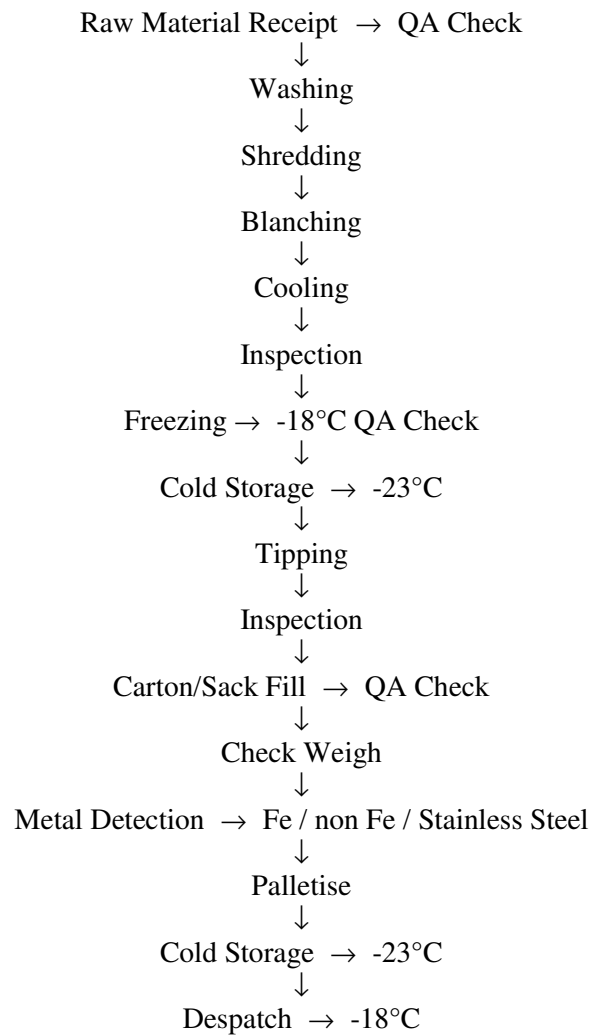
**FOOD ADDITIVES**

<b>E. Number</b>	<b>Name</b>	<b>In Which Ingredient</b>	<b>Function in Ingredient</b>	<b>Function in Final Product</b>	<b>% In Final Product</b>
None					

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**PROCESS INFORMATION****PROCESS FLOW CHART\***

Note: this is a generic flow chart which does not refer to any specific production site

**SHREDDED CABBAGE**

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------



## **COSHH Data For Frozen Vegetables**

Treat as you would any frozen material i.e. if engaged in prolonged handling of the vegetables wear gloves.

Care should be used when lifting full cases of frozen vegetables.

There are no other perceived COSHH implications regarding the use of frozen vegetables.


**THE CONTENTS OF THIS SPECIFICATION ARE  
CONFIDENTIAL TO FOODNET LTD AND THE  
CUSTOMER, AND MAY NOT BE DISCLOSED TO ANY  
OTHER PARTY.**

*Please check our website ([www.foodnet.ltd.uk](http://www.foodnet.ltd.uk)) for updates on this spec.*

Signed on behalf of Foodnet Ltd:-

Name: Gianluca Oberto

Job Title: Technical Manager

Signature: 

Date: 1<sup>st</sup> May 2017

Signed on behalf of the Customer:-

Name:

Job Title:

Signature:

Date:

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------

**Issues & Amendments**

Issue N°	Amend. N°	Date	Amendments	Compiled by
1	1	01/02/2016	New entry	G. Oberto
2	1	01/05/2017	Defect tolerances – minimum ref samples; Reviewed BB and Traceability info. Added Storage Conditions. Reviewed Food Intolerance table, Flow Chart and Amendment table.	G. Oberto

Doc Ref: PRO-SPE	Issue date: 01.05.2017	Issue No: 2	Prepared by: G. Oberto	Authorised by: Rhys Owen
---------------------	---------------------------	----------------	---------------------------	-----------------------------