



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

Product Specification

20 x 20 x 10mm Diced Swede

Date: 18th February 2010

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PACK SIZE 1 x 10kg

ORIGIN: UK

GENERAL The product shall be prepared from fresh sound raw material that is free from all toxic residues and taints. The final product shall comply with all current U.K. and E.C. Food Legislation.

INGREDIENTS Swedes 100% Declare as: Swede
(*Brassica napus var. napobrassica*)

PROCESSING Swede are delivered fresh to the factory, each load is sampled and assessed for foreign material and physical defects. The load is then cleaned, peeled, cut, blanched, frozen and filled into bulk palletainers. The swede is sampled and assessed against specification. The palletainers are then labelled and transferred to the cold store, where they are stored at -23°C until required for packing.

PACKING During packing, the swede is inspected before weighing and filling into blue poly lined cartons. The cartons are Best Before and Production date coded, checkweighed and metal detected, palletised and stretch wrapped before being returned to store at -23°C to await despatch.

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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: -

<u>Per 1000g</u>	<u>Target</u>	<u>Maximum</u>
Clumps (no of dice)	10	10
Foreign Material	Nil	Nil
E.V.M.	Nil	1
<u>Per 500g</u>		
Gross Blemish	Nil	Nil
Major Blemish	1	3
Greening	5	10
Minor Blemishes	5	10
Oversize	3% w/w	5% w/w
Undersize <12mm	5% w/w	10% w/w

DEFINITIONS OF DEFECTS**Clumps**

These are where three or more swedes are frozen together which cannot be readily separated without causing damage to the swede.

Foreign Material

This includes any material not derived from the swede plant or defined as EVM, such as insects, pieces of insects, wood, glass, stones, metal, sand, grit, plastic or any other material which will render the product unacceptable.

Gross Blemish

A gross blemish is a black or brown, or decomposed area which covers an area greater than 25% of the surface area of the die.

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Major Blemish

A major blemish is a discoloured area (other than green) either as a single blemish or as an aggregate of blemishes covering an area greater than 6mm diameter.

Greening

A die with greening is one which is green for greater than half its surface area.

Minor Blemish

A minor blemish is a discoloured area (other than green) either as a single blemish or an aggregate of blemishes covering an area of less than 6mm diameter. Single blemishes below 2mm shall be ignored.

Oversize

Dice which are larger than one and a half times the declared size in any one or more dimensions.

Undersize

These are dice which are less than 7mm in any one dimension, and under 12mm in any two dimensions.

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

Bright, yellow, uniform throughout the sample.

FLAVOUR

Full characteristic sweet flavour, typical of swede.

TEXTURE

Swedes shall be uniformly firm, but yielding to the bite, free from tough cores and any fibrous or woody material.



Average Sample

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MICROBIOLOGICAL

Organism	Target	Maximum
T V C @ 30°C	5×10^5	1×10^6
Total Coliforms	5×10^2	1×10^3
E. coli	5/g	15/g
Yeasts	1×10^2 /g	2×10^3 /g
Moulds	1×10^2 /g	1.5×10^3
Staph aureus	<40/g	1×10^2 /g
Salmonella	Absent in 25g	Absent in 25g

ANALYTICAL

Product shall be blanched to give a trace positive peroxidase reaction (guaiacol test) between 60 and 90 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 hourly using 3.5mm ferrous and 3.5mm non-ferrous & 4.5mm stainless steel test pieces.

CODING

Best Before End shall be twenty four months following the month of packing e.g. if packed 1st May 2010 then BEST BEFORE END MAY 2012 or BEST BEFORE 01/05/2012.

Production / Traceability Code Four figure International date code (Year number, Day number) plus factory identification code and shift code e.g. product packed 1 January 2010 = 0001 or 01/01/2010.

CARTON LINERS

Dark blue food grade polythene liner of a **minimum** thickness of 45µm.

CARTONS

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

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NUTRITIONAL INFORMATION

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

100g of uncooked swede typically contains: -

Parameter	Value / 100g	Methodology
Energy - kcal	24	McCance & Widdowson 6 th Edition
Energy - kJ	101	McCance & Widdowson 6 th Edition
Moisture	91.2g	McCance & Widdowson 6 th Edition
Carbohydrate	5.0g	McCance & Widdowson 6 th Edition
- as sugars	4.9g	McCance & Widdowson 6 th Edition
- as polyols	0.0g	McCance & Widdowson 6 th Edition
- as starch	0.1g	McCance & Widdowson 6 th Edition
Fat	0.3g	McCance & Widdowson 6 th Edition
- as saturates	Trace	McCance & Widdowson 6 th Edition
- as mono unsaturates	Trace	McCance & Widdowson 6 th Edition
- as poly unsaturates	0.2g	McCance & Widdowson 6 th Edition
Protein	0.7g	McCance & Widdowson 6 th Edition
Fibre	1.9g	McCance & Widdowson 6 th Edition
Sodium	15mg	McCance & Widdowson 6 th Edition
Cholesterol	0.0g	McCance & Widdowson 6 th Edition
Vitamin A	0.0µg	McCance & Widdowson 6 th Edition
Vitamin B6	0.21mg	McCance & Widdowson 6 th Edition
Vitamin B12	0.0µg	McCance & Widdowson 6 th Edition
Vitamin C	31mg	McCance & Widdowson 6 th Edition
Vitamin D	0.0µg	McCance & Widdowson 6 th Edition
Vitamin E	Trace/mg	McCance & Widdowson 6 th Edition
Thiamin	0.15mg	McCance & Widdowson 6 th Edition
Riboflavin	Trace/mg	McCance & Widdowson 6 th Edition
Niacin	1.2mg	McCance & Widdowson 6 th Edition
Folic Acid	31µg	McCance & Widdowson 6 th Edition
Biotin	0.1µg	McCance & Widdowson 6 th Edition
Pantothenic Acid	0.11mg	McCance & Widdowson 6 th Edition
Calcium	53mg	McCance & Widdowson 6 th Edition
Phosphorus	40mg	McCance & Widdowson 6 th Edition
Iron	0.1mg	McCance & Widdowson 6 th Edition
Magnesium	9mg	McCance & Widdowson 6 th Edition
Zinc	0.3mg	McCance & Widdowson 6 th Edition
Iodine	µg	McCance & Widdowson 6 th Edition
Potassium	170mg	McCance & Widdowson 6 th Edition

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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: Alan Gosling Job Title: Technical Consultant

Signature:  Date: 18th February 2010

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: Alan Gosling Job Title: Technical Consultant

Signature:  Date: 18th February 2010

Where any answer is YES, see details below.

Product or Material	Details of Genetic Modification

I confirm I have made any necessary enquiries and obtained relevant written assurances from suppliers to verify the accuracy of the details provided above. I confirm the above data supplied is correct and can be used without reservation to advise customers.

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FOOD INTOLERANCE

Food Intolerance Data		
Does the material supplied contain any of the following? (NO) Absent, (YES) Present		
Allergen	NO / YES	Reason for presence if YES
Milk & Milk Derivatives	NO	
Egg & Egg Derivatives	NO	
Animal Products (*)	NO	
Fish/Shellfish/Crustaceans/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 / N	
Vegans?	Y / N	
Kosher?	Y / N	
Halal?	Y / N	
Organic?	Y / N	

FOOD ADDITIVES

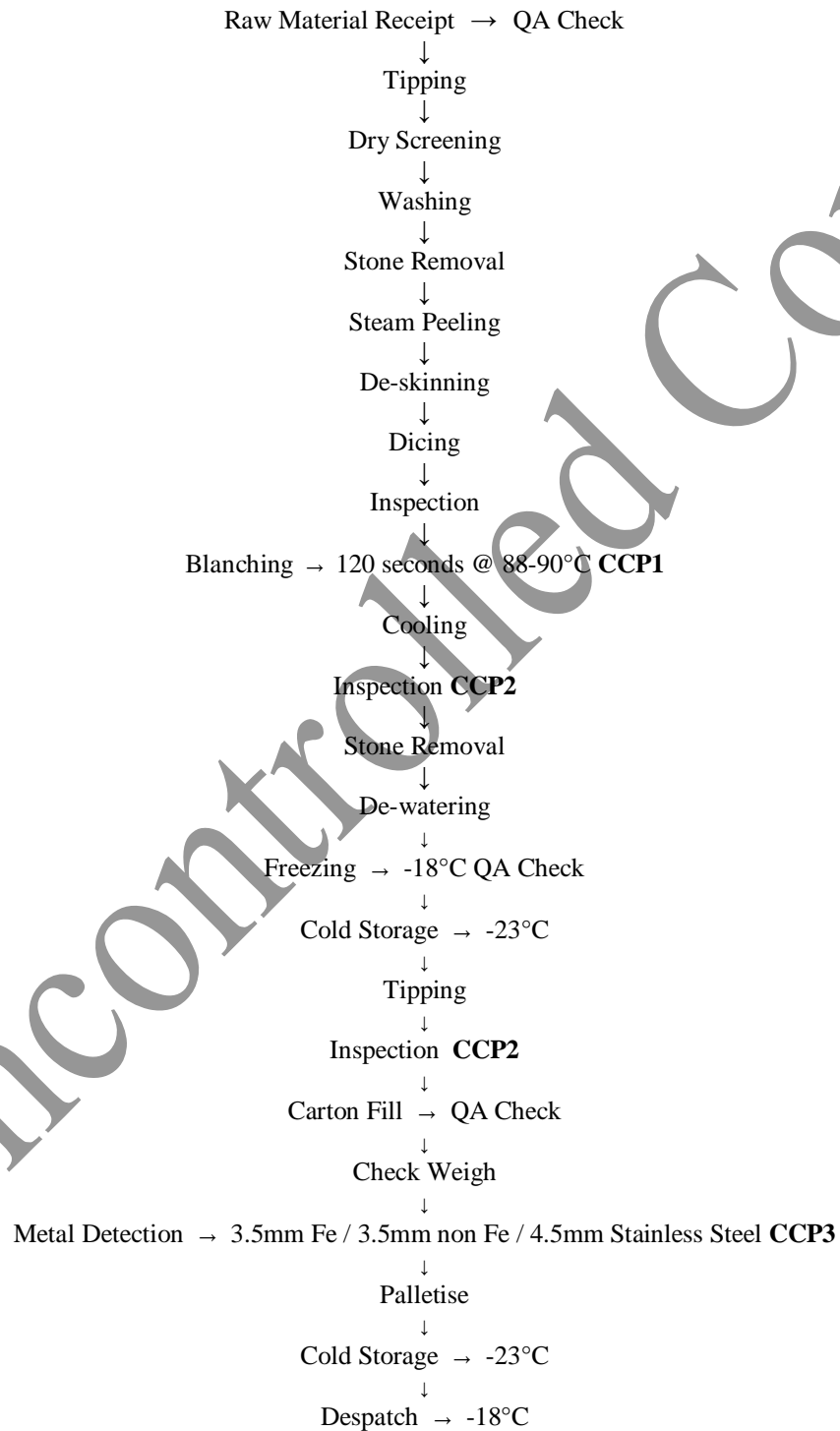
E. Number	Name	In Which Ingredient	Function in Ingredient	Function in Final Product	% In Final Product
None					

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PROCESS INFORMATION

PROCESS FLOW CHART

DICED SWEDES



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CRITICAL CONTROL POINTS:

to include time / temperature / frequency / target and sensitivity of all process steps.

CCP Number	Process Step	Controls in place
CCP1	Effective blanching to minimise microbiological loading. Half hourly checks.	Continuous chart recoding of temperature and guaiacol test for adequate blanching.
CCP2	Inspection of the product. Continuous control	To remove foreign material via manual inspection.
CCP3	Metal detector efficiency. Hourly checks.	Testing of detector using certified test pieces of 3.5mm Ferrous and 3.5mm non-Ferrous and 4.5mm Stainless Steel..

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.**

Signed on behalf of Foodnet Ltd:-

Name: Alan Gosling

Job Title: Technical Consultant

Signature: 

Date: 18th February 2010

Signed on behalf of the Customer:-

Name:

Job Title:

Signature:

Date:

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