

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

Technical Specification			
Product:	Last Update:	Product Code:	
Diced Swede 20MM IQF	31/01/2023	SWE004	

PACK SIZE 1 x 10kg; 1 x 15kg; 1 x 25kg

ORIGIN: UK

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 (minimum of +75°C for 30 seconds).

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 swedes are 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 -18°C to await despatch to the UK at -18°C.

DEFECT TOLERANCES

<u>Per 100</u>	<u> </u>	<u>Target</u>	<u>Maximum</u>
	Clumps (no of dice)	5	10
	Foreign Material	Nil	Nil
	E.V.M.	Nil	1
<u>Per 250</u>	<u>)g</u>		
	Gross Blemish	Nil	Nil
	Major Blemish	1	5
	Minor Blemish	5	30
	Greening	5	20
	Oversize	3% w/w	5% w/w
	Undersize	5% w/w	10% w/w

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PRO-SPE	31.01.2023	4	Filipe Soares	Gianluca Oberto



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DEFINITIONS OF DEFECTS

Clumps

These are where three or more swede 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 dice.

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 dice 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

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

Undersize

Any dice which is less than 1/3 of the declared size in one or more dimensions.

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ORGANOLEPSIS (Carried out on a thawed sample.)

COLOUR Bright, yellowy cream, uniform within the sample.

FLAVOUR Full characteristic sweet flavour, typical of swede.

TEXTURE Swede 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
TVC@30°C	5 x 10 ⁵	1 x 10 ⁶
Total Coliforms	5 x 10 ²	1 x 10 ⁴
E. coli	<4 x 10 ¹	1 x 10 ²
Listeria mono	Absent in 25g	1 x 10 ²
Salmonella	Absent in 25g	Absent in 25g

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. Minimum BB date on delivery: 6 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 Blue food grade polythene sack of a minimum thickness of 110μm.

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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 6th Edition
Energy - kJ	101	McCance & Widdowson 6th Edition
Moisture	91.2g	McCance & Widdowson 6th Edition
Carbohydrate	5.0g	McCance & Widdowson 6th 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 6th Edition
- as mono unsaturates	Trace	McCance & Widdowson 6th 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
Pantothentic 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

I confirm that this product is not genetically modified or produced from genetically modified organisms. No genetically modified organisms have been used as processing aids or additives. This product does not require specific GM labelling as per Regulation (EC) 1829/2003.

Name: Gianluca Oberto Job Title: Technical Manager

Signature: Date: 31st January 2023

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: 31st January 2023

COSHH Data

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

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

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

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FOOD INTOLERANCE

Allergen	NO / YES	Reason for presence if YES
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	
ВНА / ВНТ	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	
	NO	
Mustard	NO	
Mustard Celery/Celeriac	NO	

^{*}Including any product derived from slaughtered animals, e.g. gelatine, rennet

Please be aware the manufacturing sites we supply this item from may handle allergens in production. Procedures are in place to prevent cross-contamination.

Is this product	Suitable for:
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Vegans	Yes (Not certified)	Vegetarians	Yes	Organic	No
Halal	Yes (Not certified)	Kosher	Yes (Not certified)		

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^{**}Including wheat, corn, barley, rye, oats, etc.



FOOD ADDITIVES

Signed on behalf of Foodnet Ltd:

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

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

Name: Gianluca Oberto Signature:	Job Title: Technical Manager Date: 31 st January 2023
Signed on behalf of the Customer:	
Name:	Job Title:
Signature:	Date:

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PROCESS INFORMATION

PROCESS FLOW CHART*

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

DICED SWEDES

Raw Material Receipt \rightarrow QA Check **Tipping** \downarrow **Dry Screening** Washing Stone Removal \downarrow Steam Peeling \downarrow De-skinning \downarrow Dicing Inspection Blanching Cooling Inspection Stone Removal De-watering Freezing \rightarrow -18°C QA Check \downarrow Cold Storage \rightarrow -23°C Tipping Inspection \downarrow Carton Fill → QA Check Check Weigh $\mathsf{Metal}\;\mathsf{Detection} \to \mathsf{QA}\;\mathsf{Check}$ Palletise \downarrow Cold Storage \rightarrow -23°C Despatch \rightarrow -18°C

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Issues & Amendments

Issue N°	Amend. N°	Date	Amendments	Compiled by
1	1	01/02/2016	New entry	G. Oberto
			Defect tolerances – minimum ref samples; Reviewed BB and Traceability info. Added Storage Conditions.	
2	1	01/05/2017	Reviewed Food Intolerance table, Flow Chart and Amendment table.	G. Oberto
3	1	31/01/2020	3 Year update – general revision	G. Oberto
4	1	31/01/2023	3 Year update – general revision	F. Soares

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