

Technical Specification		
Product:	Last Update:	Product Code:
Diced Sweet Potato 20MM	31/01/2020	POT016

**PACK SIZE** 1 x 10kg;

ORIGIN: China / USA / Spain / 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.

**INGREDIENTS** Sweet Potato 100% Declare as: Sweet Potato

(Ipomoeba batatas var. batatus)

**PROCESSING** Sweet potatoes are delivered fresh to the factory; each load is sampled and assessed for foreign material and physical defects. The load is then cleaned, hand peeled, diced, blanched, frozen and filled into bulk palletainers. The frozen sweet potatoes are 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 sweet potatoes 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.

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

Processing: - Raw material

Final Product Temperature

Packing: - Metal detection

Check weighing

Final product physical defect levels

Organolepsis Case quantity Case sealing

Case coding and print quality

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#### **DEFECT TOLERANCES**

Per 1000g sample	<u>Target</u>	<u>Maximum</u>
Clumps	3%w/w	5%w/w
Foreign Matter	Nil	Nil
Extraneous Vegetable Matter (number)	Nil	1
Per 250g sample		
Gross Blemish	Nil	Nil
Major Blemish	1	3
Minor Blemish	5	10
Oversize (>25mm)	3% w/w	5% w/w
Undersize (<10mm)	5% w/w	10% w/w

# **DEFINITIONS OF DEFECTS**

#### Clumps

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

#### **Foreign Material**

This includes any material not derived from the sweet potato 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 that 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.

### **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.

## <u>Oversi</u>ze

Dice that are larger than 25mm in any one or more dimensions.

#### Undersize

Dice that are less than 10mm in the largest dimension.

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

	Minimum samples to be taken (1Kg of		
	prod	uct per each it	:em)
Quantity Delivered (Kg)	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 thawed sample.)

**COLOUR** Bright and uniform pale orange to orange, typical of the product.

We recommend the sweet potato to be cooked from frozen. The sweet potato may turn grey/black if tempered/defrosted before

use. Foodnet Ltd will not be held responsible if this occurs.

**FLAVOUR** Slightly sweet characteristic sweet potato flavour.

<u>TEXTURE</u> Dice may be slightly soft or very slightly fibrous; there may be a

slight amount of breakdown.



Average sample

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### **MICROBIOLOGICAL**

Organism	Target	Maximum
T V C @ 30℃	5 x 10 <sup>5</sup>	1 x 10 <sup>6</sup>
Total Coliforms	5 x 10 <sup>2</sup>	3 x 10 <sup>3</sup>
E. coli	<4 x 10 <sup>1</sup>	1 x 10 <sup>2</sup>
Listeria mono	Absent in 25g	1 x 10 <sup>2</sup>
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.

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## **NUTRITIONAL INFORMATION**

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

100g of uncooked sweet potato typically contains: -

Parameter	Value / 100g	Methodology
Energy - kcal	87	McCance & Widdowson 7 <sup>th</sup> Edition
Energy - kJ	372	McCance & Widdowson 7 <sup>th</sup> Edition
Moisture	73.7g	McCance & Widdowson 7 <sup>th</sup> Edition
Carbohydrate	21.3g	McCance & Widdowson 7 <sup>th</sup> Edition
- as sugars	5.7g	McCance & Widdowson 7 <sup>th</sup> Edition
- as polyols	0.0g	McCance & Widdowson 7 <sup>th</sup> Edition
- as starch	15.6g	McCance & Widdowson 7 <sup>th</sup> Edition
Fat	0.3g	McCance & Widdowson 7 <sup>th</sup> Edition
- as saturates	0.1g	McCance & Widdowson 7 <sup>th</sup> Edition
- as mono unsaturates	0.0g	McCance & Widdowson 7 <sup>th</sup> Edition
- as poly unsaturates	0.1g	McCance & Widdowson 7 <sup>th</sup> Edition
Protein	1.2g	McCance & Widdowson 7 <sup>th</sup> Edition
Fibre	2.4g	McCance & Widdowson 7 <sup>th</sup> Edition
Sodium	40mg	McCance & Widdowson 7 <sup>th</sup> Edition
Vitamin A	3.9mg	McCance & Widdowson 7 <sup>th</sup> Edition
Vitamin B <sub>6</sub>	0.09mg	McCance & Widdowson 7 <sup>th</sup> Edition
Vitamin B <sub>12</sub>	0.0mg	McCance & Widdowson 7 <sup>th</sup> Edition
Vitamin C	23mg	McCance & Widdowson 7 <sup>th</sup> Edition
Vitamin D	0.0μg	McCance & Widdowson 7 <sup>th</sup> Edition
Vitamin E	0.28mg	McCance & Widdowson 7 <sup>th</sup> Edition
Thiamin	0.17mg	McCance & Widdowson 7 <sup>th</sup> Edition
Riboflavin	0.00mg	McCance & Widdowson 7 <sup>th</sup> Edition
Niacin	0.5mg	McCance & Widdowson 7 <sup>th</sup> Edition
Folic Acid	17μg	McCance & Widdowson 7 <sup>th</sup> Edition
Biotin	0.0μg	McCance & Widdowson 7 <sup>th</sup> Edition
Pantothentic Acid	0.59mg	McCance & Widdowson 7 <sup>th</sup> Edition
Calcium	24mg	McCance & Widdowson 7 <sup>th</sup> Edition
Phosphorus	50mg	McCance & Widdowson 7 <sup>th</sup> Edition
Iron	0.7mg	McCance & Widdowson 7 <sup>th</sup> Edition
Magnesium	18mg	McCance & Widdowson 7 <sup>th</sup> Edition
Zinc	0.3mg	McCance & Widdowson 7 <sup>th</sup> Edition
Iodine	2.0µg	McCance & Widdowson 7 <sup>th</sup> Edition
Potassium	370mg	McCance & Widdowson 7 <sup>th</sup> 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: Gianluca Oberto

Job Title: Technical Manager

Signature:

Date: 31st January 2020

#### **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 2020

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## **FOOD INTOLERANCE**

Does the material supplied contain a Allergen	NO / YES	Reason for presence if YES
Milk & Milk Derivatives	NO NO	Reason for presence if 123
	NO	
Egg & Egg Derivatives		+
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/Celeriac	NO	
Lupins	NO	
Lupins		<u> </u>

<sup>\*</sup>Including any product derived from slaughtered animals, e.g. gelatine, rennet

<u>Please be aware the manufacturing sites we supply this item from may handle allergens in production.</u> 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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<sup>\*\*</sup>Including wheat, corn, barley, rye, oats, etc.



## **FOOD ADDITIVES**

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

### **COSHH Data**

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 vegetables.

Signed on behalf of Foodnet Ltd:

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.

Name: Gianluca Oberto

Signature: Date: 31st January 2020

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 SWEET POTATOES**

Raw Material Receipt $\rightarrow$ QA Check
$\downarrow$
Washing
$\downarrow$
Hand Peeling
$\downarrow$
Dicing
$\downarrow$
Inspection
<b>↓</b>
Blanching
<b>↓</b>
Cooling
<b>↓</b>
Inspection
<b>V</b>
Freezing → -18°C QA Check
↓ 
Cold Storage → -23°C
↓ Tinning
Tipping ↓
·
Inspection ↓
∨ Carton Fill → QA Check
Carton Fili → QA Check  ↓
✓ Check Weigh
↓ ↓
✓ Metal Detection → QA Check
₩ CLUI Detection > QA check
↓ Palletise
↓ ↓
Cold Storage → -23°C
↓ ↓
Despatch → -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

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