

Technical Specific	ation	
Product:	Last Update:	Product Code:
Super Sweet Corn Kernel IQF	31/01/2023	SWE015

# **PACK SIZE** 1 x 10kg; 1 x 20kg;

ORIGIN: Hungary, Spain, Poland

**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).

<b>INGREDIENTS</b>	Sweetcorn	100%	Declare as: Sweetcorn
			(Zea mays)

**PROCESSING** Sweetcorn cobs are delivered fresh to the factory and each load is sampled and assessed for grade, foreign material and physical defects. The cobs are then de-husked, inspected, and washed before the kernels are cut from the cob. The kernels are then cleaned, blanched, cooled, inspected, frozen and filled into cartons. Each pallet of frozen sweetcorn is sampled and assessed against specification. The pallets are then labelled and transferred to the cold store at  $-23^{\circ}$ C until required for packing.

**PACKING** During packing, the sweetcorn 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 -18°C to await despatch to the UK at -18°C.

# DEFECT TOLERANCES

<u>Per 1000g</u>		
Clum	ıps	4% w/w
Fore	ign Matter	Nil
E.V.N	И.	1
<u>Per 200g</u>		
Majo	or Blemish	2
Mino	or Blemish	6
Blac	k Eyes	10
Pale	Silks	3
Pulle	ed Kernels (with attached stem)	8
Dam	aged Kernels	8% w/w
Misc	ut	10% w/w

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#### **DEFINITIONS OF DEFECTS**

#### <u>Clumps</u>

A clump is defined as five or more kernels welded together which cannot be readily separated without causing damage to the kernels.

#### **Foreign Material**

This includes any material not derived from the sweetcorn plant, nor defined as EVM. Examples of foreign matter include insects, pieces of insect, wood, glass, stones, metal, snails, slugs etc. unacceptable.

#### EVM

This includes any vegetable matter other than sweetcorn kernels which is derived from the sweet corn plant, such as husk or leaf larger in area than 6mm diameter, dark silks longer than 12mm, pieces of unattached cob greater than an equivalent circle of 3mm in diameter.

#### **Major Blemish**

Discoloured or blemished areas, other than black eyes, equal to or greater than an equivalent circle of 3mm in diameter, either as a single blemish or as an aggregate of blemishes.

#### Minor Blemish

Discoloured or blemished areas, other than black eyes, less than an equivalent circle of 3mm in diameter.

#### **Black Eyes**

Sweetcorn kernels which exhibit a complete or partial dark ring on the cut surface of the kernel.

# Pale Silks

Pale silks longer than 12mm.

# Pulled Kernels (with attached stem)

Corn kernels which have not been cut, but have been pulled from the cob, and retain some stem tissue.

# Damaged Kernels

Kernels which are crushed and/or have loose skins.

#### <u>Miscut</u>

Kernels which are cut either very high up the kernel or low down the kernel. This includes pulled kernels without attached stem.

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**ORGANOLEPSIS** (Carried out on a thawed sample.)

**<u>COLOUR</u>** Characteristic pale yellow, yellow or golden/dark yellow.

**FLAVOUR** Full, natural and characteristic sweetcorn flavour.

**TEXTURE**Kernel contents are opaque and viscous, they tend to "pop" or<br/>"squirt" when chewed and have reasonably tender skins (pericarps)<br/>which can be chewed easily.



Average sample

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# MICROBIOLOGICAL

Organism	Target	Maximum
T V C @ 30°C	1 x 10 <sup>5</sup>	5 x 10⁵
Total Coliforms	1 x 10 <sup>2</sup>	1 x 10 <sup>3</sup>
E. coli	Nil	1 x 10 <sup>2</sup>
Listeria mono	Absent in 25g	1 x 10 <sup>2</sup>
Salmonella	Absent in 25g	Absent in 25g

**<u>ANALYTICAL</u>** 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.

**<u>CARTON LINERS</u>** Blue food grade polythene liner of a minimum thickness of 30µm.

**<u>CARTONS</u>** Corrugated fibreboard of glued construction, no metal staples to be used. Shall be sealed using blue adhesive tape.

**<u>SACKS</u>** Blue food grade polythene liner of a minimum thickness of  $110\mu m$ .

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#### **NUTRITIONAL INFORMATION**

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

100g of uncooked sweet corn typically contains: -

Parameter	Value / 100g	Methodology
Energy - kcal	98	McCance & Widdowson 6 <sup>th</sup> Edition
Energy - kJ	415	McCance & Widdowson 6 <sup>th</sup> Edition
Moisture	76.0g	McCance & Widdowson 6 <sup>th</sup> Edition
Carbohydrate	17.0g	McCance & Widdowson 6 <sup>th</sup> Edition
- as sugars	2.0g	McCance & Widdowson 6 <sup>th</sup> Edition
- as polyols	0.0g	McCance & Widdowson 6 <sup>th</sup> Edition
- as starch	14.6g	McCance & Widdowson 6 <sup>th</sup> Edition
Fat	1.8g	McCance & Widdowson 6 <sup>th</sup> Edition
- as saturates	0.2g	McCance & Widdowson 6 <sup>th</sup> Edition
- as mono unsaturates	0.8g	McCance & Widdowson 6 <sup>th</sup> Edition
- as poly unsaturates	0.7g	McCance & Widdowson 6 <sup>th</sup> Edition
Protein	3.4g	McCance & Widdowson 6 <sup>th</sup> Edition
Fibre	1.5g	McCance & Widdowson 6 <sup>th</sup> Edition
Sodium	1mg	McCance & Widdowson 6 <sup>th</sup> Edition
Cholesterol	Og	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin A	16µg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin B <sub>6</sub>	0.15mg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin B <sub>12</sub>	Ομg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin C	8.0mg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin D	Оµg	McCance & Widdowson 6 <sup>th</sup> Edition
Vitamin E	0.69mg	McCance & Widdowson 6 <sup>th</sup> Edition
Thiamin	0.16mg	McCance & Widdowson 6 <sup>th</sup> Edition
Riboflavin	0.05mg	McCance & Widdowson 6 <sup>th</sup> Edition
Niacin	1.9mg	McCance & Widdowson 6 <sup>th</sup> Edition
Folic Acid	41µg	McCance & Widdowson 6 <sup>th</sup> Edition
Biotin	0.0µg	McCance & Widdowson 6 <sup>th</sup> Edition
Pantothentic Acid	0.73mg	McCance & Widdowson 6 <sup>th</sup> Edition
Calcium	3.0mg	McCance & Widdowson 6 <sup>th</sup> Edition
Phosphorus	91mg	McCance & Widdowson 6 <sup>th</sup> Edition
Iron	0.7mg	McCance & Widdowson 6 <sup>th</sup> Edition
Magnesium	37mg	McCance & Widdowson 6 <sup>th</sup> Edition
Zinc	0.4mg	McCance & Widdowson 6 <sup>th</sup> Edition
lodine	Оµд	McCance & Widdowson 6 <sup>th</sup> Edition
Potassium	260mg	McCance & Widdowson 6 <sup>th</sup> 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

Signature:

Job Title: Technical Manager

Date: 31<sup>st</sup> 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 Signature: Job Title: Technical Manager

Date: 31<sup>st</sup> 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
1ilk & Milk Derivatives	NO	
gg & Egg Derivatives	NO	
nimal Products (*)	NO	
ish/Shellfish/Crustations/Molluscs	NO	
ereals (**)	YES	Sweetcorn 100%
luten	NO	
east/Yeast Extract	NO	
oya/Soya Derivatives	NO	
ruit & Fruit Derivatives	NO	
eef & Beef Products	NO	
ork & Pork Products	NO	
amb & Lamb Products	NO	
oultry & Poultry Products	NO	
egumes	NO	
eanuts	NO	
ulphite >10ppm	NO	
1SG	NO	
HA / BHT	NO	
enzoates	NO	
lutamates	NO	
zo & Coal Tar Dyes	NO	
dded Colour	NO	
dded Flavour	NO	
reservatives	NO	
ntioxidants	NO	
dded Salt	NO	
uts/Nut Oils	NO	
affeine	NO	
esame Products	NO	
arlic	NO	
oppy Seeds	NO	
lustard	NO	
elery/Celeriac	NO	
upins	NO	

\*\*Including wheat, corn, barley, rye, oats, etc.

<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>

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

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# FOOD ADDITIVES

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.

Signed on behalf of Foodnet Ltd:

Name: Gianluca Oberto

Signature:

Job Title: Technical Manager

Date: 31<sup>st</sup> 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.

#### SWEET CORN KERNEL

Raw Material Receipt  $\rightarrow$  QA Check  $\downarrow$ De-husking  $\downarrow$ Inspection  $\downarrow$ Cutting  $\downarrow$ Screening  $\downarrow$ **Flotation Washer**  $\downarrow$ Screening  $\downarrow$ Blanching  $\downarrow$ Cooler  $\downarrow$ Dewatering  $\downarrow$ Freezing  $\rightarrow$  -18°C QA Check  $\downarrow$ Inspection  $\downarrow$ Cold Storage  $\rightarrow$  -23°C  $\downarrow$ Tipping  $\downarrow$ Inspection  $\downarrow$ Carton Fill  $\rightarrow$  QA Check  $\downarrow$ Check Weigh  $\downarrow$ Metal Detection  $\rightarrow$  QA Check Palletise  $\downarrow$ Cold Storage  $\rightarrow$  -23°C  $\downarrow$ Despatch  $\rightarrow$  -18°C

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# Issues & Amendments

Issue	Amend.	Date	Amendments	Compiled by
N°	N°			
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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