



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

Technical Specification		
<b>Product:</b> Choi Sum Cut 4CM	<b>Last Update:</b> 31/01/2020	<b>Product Code:</b> CHI013

**PACK SIZE** 1 x 10kg;

**ORIGIN:** China

**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** Choi Sum 100% Declare as: Choi Sum  
(*Brassica chinensis var. parachinensis*)

**PROCESSING** Choi Sum are delivered fresh to the factory, each load is sampled and assessed for foreign material and physical defects. The load is then cleaned, washed, length cut 4cm, blanched, cooled, inspected, frozen and filled into bulk palletainers. The cut Choi Sum are sampled and assessed against specification. The palletainers are then labelled and transferred to the cold store, where they are stored at -18°C until required for packing.

**PACKING** During packing, choi sum are inspected before weighing and filling into blue poly lined cartons. The cartons are Best Before and Production date coded, check weighed 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**

<b><u>Per 1000g</u></b>	<b><u>Target</u></b>	<b><u>Maximum</u></b>
Clumps	1% w/w	2% w/w
Foreign Matter	Nil	Nil
Insect Damage	Nil	Nil
Choi Sum Flowers	Nil	Nil
Leaves	30% w/w	20% w/w
Stem	70% w/w	80% w/w
Colour Variants	2% w/w	5% w/w
Length >6cm	Nil	Nil
Length >5.0 cm	5% w/w	10% w/w
Length < 3.0cms	5% w/w	10% w/w
Diameter > 19mm	Nil	Nil
Diameter > 13mm	5% w/w	10 % w/w

## **DEFINITIONS OF DEFECTS**

### **Clumps**

This is where 3 or more slices are welded together so that the slices cannot be readily separated without causing damage to the slices.

### **Foreign Material**

This includes any material not derived from the Choi Sum plant. Examples of Foreign Matter include insects, pieces of insects, wood, glass, stones, metal, toxic berries, seed or flower heads, snails, slugs or any other material which will render the product unacceptable.

### **Insect Damage**

This includes slices with damage caused by insects.

### **Choi Sum Flowers**

This includes any Choi Sum flowers caused by over maturity.

### **Colour Variants**

This refers to any unit that is brown in colour and is conspicuously different in colour from the normal green of the rest of the sample. Stems with a pale/yellowish tinge are not classified as Colour Variant.

### **Size**

See table for definitions.

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*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 thawed sample.)

**COLOUR**

Light green stems with dark green leaves.

**FLAVOUR**

Typical of Choi Sum with no off flavours.

**TEXTURE**

Stalks shall be firm without woodiness, leaves shall be tender.



Average sample

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#### **MICROBIOLOGICAL**

Organism	Target	Maximum
<i>TVC @ 30°C</i>	$5 \times 10^5$	$1 \times 10^6$
<i>Total Coliforms</i>	$1 \times 10^2$	$5 \times 10^3$
<i>E. coli</i>	Nil	$1 \times 10^2$
<i>Listeria mono</i>	Absent in 25g	$1 \times 10^2$
<i>Salmonella</i>	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 choy sum typically contains: -

Parameter	Value / 100g	Methodology
Energy - kcal	12	USDA version SR20
Energy - kJ	48	USDA version SR20
Moisture	95.5g	USDA version SR20
Carbohydrate	1.8g	USDA version SR20
- as sugars	0.8g	USDA version SR20
- as polyols	0.0g	USDA version SR20
- as starch	Trace	USDA version SR20
Fat	0.2g	USDA version SR20
- as saturates	Trace	USDA version SR20
- as mono unsaturates	Trace	USDA version SR20
- as poly unsaturates	0.1g	USDA version SR20
Protein	1.6g	USDA version SR20
Fibre	1.0g	USDA version SR20
Sodium	34mg	USDA version SR20
Vitamin A	0µg	USDA version SR20
Vitamin B6	0.2mg	USDA version SR20
Vitamin B12	µg	USDA version SR20
Vitamin C	0.3mg	USDA version SR20
Vitamin D	0µg	USDA version SR20
Vitamin E	0.09mg	USDA version SR20
Thiamin	0.3mg	USDA version SR20
Riboflavin	0.6mg	USDA version SR20
Niacin	0.4mg	USDA version SR20
Folic Acid	41µg	USDA version SR20
Biotin	0µg	USDA version SR20
Pantothenic Acid	0.8mg	USDA version SR20
Calcium	93mg	USDA version SR20
Phosphorus	29mg	USDA version SR20
Iron	1.04mg	USDA version SR20
Magnesium	11mg	USDA version SR20
Zinc	0.17mg	USDA version SR20
Iodine	0µg	USDA version SR20
Potassium	371mg	USDA version SR20

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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: 31<sup>st</sup> 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: 31<sup>st</sup> January 2020

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## **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/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/Celeryiac	NO			
Lupins	NO			
*Including any product derived from slaughtered animals, e.g. gelatine, rennet				
**Including wheat, corn, barley, rye, oats, etc.				
<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>				
<b>Is this product Suitable for:</b>				
<b>Vegans</b>	Yes (Not certified)	<b>Vegetarians</b>	Yes	<b>Organic</b>
<b>Halal</b>	Yes (Not certified)	<b>Kosher</b>	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					

### **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.


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: Gianluca Oberto

Job Title: Technical Manager

Signature: 

Date: 31<sup>st</sup> January 2020

Signed on behalf of the Customer:

Name:

Job Title:

Signature:

Date:

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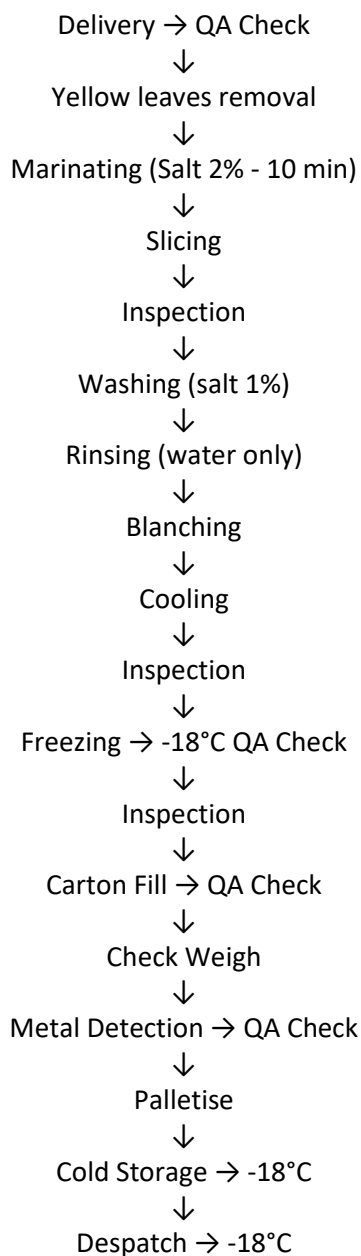
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## **PROCESS INFORMATION**

### **PROCESS FLOW CHART\***

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

#### **CUT CHOI SUM**



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### **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
3	1	31/01/2020	3 Year update – general revision	G. Oberto

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