

Technical Specification			
Product:	Last Update:	Product Code:	
Broccoli Floret 40-60mm IQF	31/01/2023	BRO005	

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

ORIGIN: Spain, China, Poland, Belgium, Turkey

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 Broccoli 100% Declare as: Broccoli

(Brassica oleracea var. italic)

PROCESSING Broccoli is harvested, delivered to the factory to be floretted. Each load is sampled and assessed for foreign material and physical defects. The load is then cleaned, blanched, frozen, size graded and filled into bulk palletainers. The frozen broccoli is 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, the broccoli florets are inspected before weighing and filling into blue poly lined cartons. The cartons are Best Before and Production date coded, check weighed, metal detected, palletised and stretch-wrapped before being returned to store at – 18°C to await despatch.

DEFECT TOLERANCES

Per 1000g		MAXIMUM
	Clump	5%w/w
	Foreign Matter	Nil
	Foreign EVM	Nil
	Attached Leaves	10
	Stalk Part	5%w/w
	Long stalk (>25mm)	15%w/w
	Dust	8%w/w
	Overmature	12
	Minor Blemish/Colour defect 2-6mm	8
	Major Blemish/Colour defect >6mm	2
	Out of size	20% w/w

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DEFINITIONS OF DEFECTS

Clumps

These are where three or more pieces of broccoli are frozen together which cannot be readily separated without causing damage to the product.

Foreign Material

This includes any material not derived from the broccoli 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.

Attached Leaves on Florets

This includes any florets which have attached leaves which are greater than 25mm in length.

Fragments and Dust

These are small pieces of broccoli less than 10mm in any dimension.

Stalk

These are units which are completely devoid of the broccoli beads and branching of the individual florets.

Long Stalk

This is where the stalk (measured from the last branching of the floret) is greater than 25mm in length.

Overmature

This includes any floret which has one or more buds showing yellow petals. This shall not be confused with paler under parts (lacking chlorophyll), which are characteristic of cut heads.

Major Colour/Blemish

This includes broccoli that is blemished or has a distinct area of brown or purple to the extent that the area affected is greater than 6mm in diameter, either as a single blemish or an aggregate of blemishes on the same piece.

Minor Colour/Blemish

This includes broccoli that is blemished to or has a distinct area of brown or purple the extent that the area affected is between 2mm and 6mm in diameter, either as a single blemish or an aggregate of blemishes on the same piece. Blemishes less than 2mm in diameter shall be ignored.

Out of Size

This is where the diameter of any floret exceeds 60 mm when measured across the smallest dimension, or where the floret is less than 40mm when measured across the longest dimension.

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ORGANOLEPSIS (Carried out on a thawed sample.)

COLOUR Fairly bright green but may be slightly non-uniform.

FLAVOUR Characteristic broccoli flavour, with only slight bitterness.

TEXTURE Tender and firm, with a yielding bite. Stalks may be slightly fibrous.



Average sample

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MICROBIOLOGICAL

Organism	Target	Maximum
TVC@30°C	5 x 10 ⁴	1 x 10 ⁶
Total Coliforms	1 x 10 ³	3 x 10 ³
E. coli	1 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 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 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.

<u>CARTONS</u> 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 broccoli typically contains: -

Parameter	Value / 100g	Methodology
Energy - kcal	34	McCance & Widdowson 7 th Edition
Energy - kJ	149	McCance & Widdowson 7 th Edition
Moisture	88.2g	McCance & Widdowson 7 th Edition
Carbohydrate	3.2g	McCance & Widdowson 7 th Edition
- as sugars	1.9g	McCance & Widdowson 7 th Edition
- as starch	0.6g	McCance & Widdowson 7 th Edition
Fat	0.6g	McCance & Widdowson 7 th Edition
- as saturates	0.2g	McCance & Widdowson 7 th Edition
- as mono unsaturates	0.1g	McCance & Widdowson 7 th Edition
- as poly unsaturates	0.3g	McCance & Widdowson 7 th Edition
Protein	4.3g	McCance & Widdowson 7 th Edition
Fibre	2.5g	McCance & Widdowson 7 th Edition
Sodium	9mg	McCance & Widdowson 7 th Edition
Vitamin B ₆	0.13mg	McCance & Widdowson 7 th Edition
Vitamin B ₁₂	0µg	McCance & Widdowson 7 th Edition
Vitamin C	79mg	McCance & Widdowson 7 th Edition
Vitamin D	0µg	McCance & Widdowson 7 th Edition
Vitamin E	1.7mg	McCance & Widdowson 7 th Edition
Thiamin	0.15mg	McCance & Widdowson 7 th Edition
Riboflavin	0.12mg	McCance & Widdowson 7 th Edition
Niacin	0.8mg	McCance & Widdowson 7 th Edition
Folic Acid	95μg	McCance & Widdowson 7 th Edition
Biotin	4.1μg	McCance & Widdowson 7 th Edition
Pantothentic Acid	0.61mg	McCance & Widdowson 7 th Edition
Calcium	48mg	McCance & Widdowson 7 th Edition
Phosphorus	81mg	McCance & Widdowson 7th Edition
Iron	1.1mg	McCance & Widdowson 7 th Edition
Magnesium	22mg	McCance & Widdowson 7 th Edition
Zinc	0.7mg	McCance & Widdowson 7 th Edition
Iodine	2μg	McCance & Widdowson 7 th Edition
Potassium	397mg	McCance & Widdowson 7 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

Food Intolerance Data	£ + £ -	in-2 (NO) About (NEC) Decout
Does the material supplied contain a 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	
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	

^{*}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. Procedures are in place to prevent cross-contamination.</u>

Is this product Suitable for	r:
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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	Job Title: Technical Manager
Signature: Obodin	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.

BROCCOLI FLORET

Raw Material Receipt $ ightarrow$ QA Check
\downarrow
Inspection
\downarrow
Washing
\downarrow
Floretting
\downarrow
Washing
\downarrow
Blanching
\downarrow
Cooling
\downarrow
Inspection
\downarrow
Dewater
\downarrow
Freezing \rightarrow -18°C QA Check
\downarrow
Bar Grading
\downarrow
Weighing
<u> </u>
Carton Fill → QA Check
<u> </u>
Check Weigh
<u> </u>
Metal Detection \rightarrow QA Check
V
Palletise
↓
Cold Storage → -18°C
↓ December > 10°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
4	1	31/01/2023	3 Year update – general revision	F. Soares

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