



ARDO PRODUCT SPECIFICATION

Broccoli 20-40 mm

Spec ID	BR130U
Date of first issue	08/12/2014
Date of revision	
Version Number	001

GENERAL DESCRIPTION

Quick frozen broccoli florets are prepared from the species *Brassica oleracea* var. *italica* L. by an appropriate freezing process from fresh, clean, sound immature inflorescence shoots which are free from fibre.

The process should ensure stability of colour and flavour and the product temperature shall not be warmer than -18°C after thermal stabilisation.

DEFINITION OF DEFECTS

- a) Clumps : these are 2 or more florets welded together by freezing, which cannot be readily separated without damaging the florets, or where a number of broken pieces or dust are fused together to give a clump heavier than 25 g.
- b) Fragments and dust: Any pieces of floret or unattached stalk or core, less than 15 mm in the largest dimension, or leaf or leaf pieces less than 25 mm in the largest dimension.
- c) Stalk/Core : This includes any unattached pieces of stalk/core equal to, or greater than, 15 mm in the largest dimension, and on which there are no buds.
- d) F.M : This includes any material not derived from the broccoli plant nor defined as FEVM. Examples of foreign matter include insects, pieces of insects, wood, glass, mineral stones, metal, snails, slugs, toxic berries etc.
- e) F.E.V.M : This includes any vegetable mater not derived from the broccoli plant, and which is non-toxic.
- f) E.V.M : This includes any extraneous vegetable material derived from the broccoli plant, other than the broccoli florets or stalk; this includes leaf or leaf pieces equal to, or greater than, 25 mm in any dimension.

- g) Size
- Floret Length : The floret shall have a maximum length of 60 mm
- Floret Head : undersize: < 20 mm, measured in the smallest dimension of the floret head
oversize: > 50 mm, measured in the smallest dimension of the floret head
- h) Process Damage : A broccoli floret from which more than a quarter of the buds have been knocked off during freezing, leaving exposed peduncles.
- i) Maturity : * An overmature head is one which has one or more buds showing yellow petals. This shall not be confused with paler underparts (lacking chlorophyll), which are characteristics of cut heads.
* A loose limp head resulting from elongated and well spreading peduncles
- j) Senescent buds : tight buds which have changed colour due to overheating, and are khaki-yellow or brown.
- k) Major blemishes : This includes florets which are blemished to the extent that the area affected is greater than an equivalent circle 6 mm in diameter, either as a single blemish or an aggregate of blemishes. This excludes senescent buds.
- l) Minor blemishes : This includes florets which are blemished to the extent that the area affected is equal to an equivalent circle between 2 mm and 6 mm in diameter, either as a single blemish, or an aggregate of blemishes. This excludes senescent buds. Blemishes less than 2mm in diameter shall be ignored.
- m) Poorly trimmed : A poorly trimmed floret is one which is affected by any of the following faults:
* where there is more than one leaf or part of leaf longer than 25mm attached to the floret
* where the base of the floret has not been clearly cut, and has a ragged heel greater than 5 mm in length
* where the floret has been severely damaged, to the extent that an area greater than a quarter of the floret head is missing
* where the floret has been split longitudinally, presenting a cut face
- n) Oxidation : Florets where oxidation occurs on the cut face.

TOLERANCES OF DEFECTS

On 1000 g sample (frozen)

- a) 2 pcs
- b) 70 g
- c) 4 pcs
- d) Nil
- e) Nil
- f) 1 pc
- g) Length: 1 pc
Head diameter: Undersize: 100 g
Oversize: 200 g

On 40 floret sub-sample (thawed)

- h) 6 pcs
- i) 7 pcs
- j) 1 pc
- k) 3 pcs
- l) Total blemishes (major + minor): 10 pcs
- m) 5 pcs
- n) 4 pc

<u>NUTRITIONAL VALUE</u>	Average per 100 g	<u>%RI*</u>
Energy	: 157 Kj / 38 Kcal	1,9%
Fat	: 0.9g	1.4%
Saturated	: 0.1g	0.5%
Carbohydrates	: 2.3g	0.8%
Sugar	: 1.4g	1.6%
Fibres	: 3.6g	14.4%
Proteins	: 3.3g	6.6%
Salt	: 0,033g	0,5%

*RI: Reference Intake of an average adult (8400kJ/2000 kcal)

DECLARATION OF ALLERGENS

Allergen included in ANNEX IIIa of the directive 2000/13/EG	Present in end product due to ingredients		Nature of the constituent	Unintended presence	
	YES	NO		YES	NO
Gluten		x		x	
Crustaceans		x		x	
Eggs		x		x	
Fish		x		x	
Peanuts		x		x	
Soybeans		x		x	
Milk		x		x	
Nuts		x		x	
Celery		x		x	
Mustard		x		x	
Sesame		x		x	
Sulphur Dioxide (>10 ppm)		x		x	
Lupine		x		x	
Molluscs		x		x	

DECLARATION OF NON-GMO

Hereby Ardo declares that none of our products, produced, packed, delivered and sold are genetically modified. None of the ingredients contain any genetically modified organism. No biotechnology or processing agents produced by means of gencechnology have been used during production. The product complies with the European non-GMO regulation (EG) nr. 1829/2003 and 1830/2003.

CHEMICAL DATA

Pesticide residue

We hereby declare that the products, supplied by Ardo, are conform to relevant legislation currently in force in the EC. Pesticides used shall be conform to the EC approved list and not exceed the MRL's defined by the EC in the finished material supplied.

Declaration on heavy metals

We hereby declare that all products ,supplied by Ardo, are conform to the EC-legislation and that they do not exceed the heavy metal tolerances defined by the EC.

BACTERIOLOGICAL DATA

	Target	Maximum
Aerobic plate count	500.000 / g	1.500.000 / g
Enterobacteriaceae	1.000 / g	10.000 / g
E. Coli	10 / g	100 / g
Yeasts and moulds	1.000 / g	5.000 / g
Listeria monocytogenes	10/ g	100 / g
Salmonella (25 g)	Absent / 25 g	Absent / 25 g

QUALITY ASSURANCE
DEPARTMENT