



ARDO UK LTD PRODUCT SPECIFICATION

Leaf Spinach 15g Portions

Spec ID	S5B
Date of first issue	18/02/2009
Version Number	004

PACK SIZES

Ardo UK Code	Ardo Article Code	Pack Size	Cases per Pallet
3S5B310	S5B310	10 x 1kg	80

GENERAL DESCRIPTION OF MATERIAL

The frozen leaf spinach portions are prepared from fresh, clean, healthy young spinach of the genus *Spinacia Oleracea*. The spinach has a uniform green colour and possesses the typical own flavour. The spinach is washed, blanched, cooled, portioned and deep frozen.

INGREDIENT DECLARATION

Spinach (100%).

DEFINITION OF DEFECTS

(a) Foreign Matter (FM)

This includes any material not of vegetable origin. Examples of FM include insects, pieces of insects, wood, glass, stones, metal, toxic berries, snails, slugs etc. Including thistles.

(b) Brown-Rotten Leaves

This includes leaves, or pieces of leaf, which are brown because of rotting to the extent that the area affected is equal to, or greater than, an equivalent circle of 10 mm in diameter, either as a single blemish or an aggregate of blemishes.

(c) Discoloured Leaves

This includes leaves, or pieces of leaf, which are blemished or discoloured to the extent that the area affected is equal to, or greater than, an equivalent circle of 10 mm in diameter, either as single blemish or an aggregate of blemishes.

(d) Weed/Grass

(e) Insects

(f) Root pieces

(g) Flowers/Stems

(h) % stem/leaf

TOLERANCES FOR DEFECTS

Assessed on a 500g sample

(a) Foreign Matter	Nil
(b) Brown-rotten leaves	1 piece
(c) Discoloured Leaves	5 pieces
(d) Weed/grass	2 pieces

(e)	Insects	0 pieces
(f)	Rootpieces	1 piece
(g)	Flowers/Seeds	2 pieces

Assessed on a 1000g sample

(h)	% stem/leaf	20%
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ORGANOLEPTIC

APPEARANCE: Uniform deep green colour portions.

AROMA: The spinach should have a good, full natural aroma.

FLAVOUR: The spinach should have a good, full natural flavour.

TEXTURE: Tender texture free from fibre, sand and grit.

CHEMICAL DATA

- Dry matter	: min. 6 %
- Nitrate	: < 2000 ppm
- Nitrite	: < 20 ppm
- Peroxidase	: negative
- Sand	: max. 0.1 % ashes, insoluble in HCl

COUNTRY OF ORIGIN

France, Belgium, The Netherlands

SHELF LIFE AND STORAGE DETAILS

Shelf Life:	24 months from packing
Minimum Shelf Life on delivery:	100 days
Storage frozen:	Store at $-18^{\circ}\text{C} \pm 3^{\circ}\text{C}$.
Storage Defrosted:	Keep refrigerated and use within 24 hours.

CODING

Best Before End:	MMYYYYY
Batch Coding:	XXYDDD: where of XX relates to factory code; Y is the year; DDD is the Julian date code

MICROBIOLOGICAL SPECIFICATION

	n	c	m	M
Total Viable Count	5	2	500,000/g	1,500,000/g
Coliforms	5	2	1,000/g	10,000/g
E.coli	5	2	10/g	100/g
Yeast and Moulds	5	2	1,000/g	5,000/g
<i>Staphylococcus aureus</i>	5	1	10/g	100/g
<i>Listeria monocytogenes</i>	5	1	10/g	100/g
<i>Salmonella</i>	5	0	Absent/25g	

Sampling plan based on the International Commission on Microbiological Specifications for Foods system (1986) where:

n =	the number of sample units examined from a lot
m =	the microbiological limit which separates good quality from marginally acceptable quality
M =	the microbiological limit which separates marginally acceptable quality from defective quality
c =	the maximum allowable number of results between m and M

INTOLERANCE INFORMATION

	Contains	Comments/ Source
Cereals containing Gluten		
Barley & Barley Derivatives	No	
Khorasan Wheat & Derivatives	No	
Oats & Oats Derivatives	No	
Rye & Rye Derivatives	No	
Spelt & Spelt Derivatives	No	
Wheat & Wheat Derivatives	No	
Nuts		
Almond & Almond Derivatives	No	
Brazil Nut & Brazil Nut Derivatives	No	
Cashew Nut & Cashew Nut Derivatives	No	
Hazelnut & Hazelnut Derivatives	No	
Macadamia Nut & Macadamia Nut Derivatives	No	
Pecan Nut & Pecan Nut Derivatives	No	
Pistachio Nut & Pistachio Nut Derivatives	No	
Queensland Nut & Queensland Nut Derivatives	No	
Walnut & Walnut Derivatives	No	
Coconut & Coconut Derivatives	No	
Pine Nuts/ Pine Kernels	No	
Peanuts & Peanut Derivatives	No	
Chestnuts & Chestnut Derivatives	No	
Nuts - Other (state source)	No	
Nut Oils & Nut Oil Derivatives	No	
Seeds		
Sesame Seed & Sesame Seed Derivatives	No	
Poppy Seeds & Poppy Seed Derivatives	No	
Cotton Seeds & Cotton Seed Derivatives	No	
Seed Oil & Seed Oil Derivatives	No	
Celery & Celery Derivatives	No	
Celeriac & Celeriac Derivatives	No	
Eggs & Egg Derivatives	No	
Lupin & Lupin Derivatives	No	
Milk & Milk Derivatives	No	
Mustard & Mustard Derivatives	No	
Soya & Soya Derivatives	No	
Sulphur Dioxide/ Sulphites >10mg/kg or 10mg/litre	No	
Fish & Fish Derivatives	No	
Crustacean & Crustacean Derivatives	No	
Molluscs & Mollusc Derivatives	No	

Product Free From	Yes/No	Comments
Oil Refined to SCOPA Std	Yes	
Oil Not Refined to SCOPA Std	Yes	
Maize/ Corn & Derivatives	Yes	
Rice & Rice Derivatives	Yes	
Spices & Spice Extracts	Yes	
Herbs & Herb Extracts	Yes	
Yeast & Yeast Extract	Yes	
Fruit & Fruit Derivatives	Yes	
Vegetable & Vegetable Derivatives	No	Spinach
Leguminous Plants	Yes	
Cocoa / & Cocoa Derivatives	Yes	
Animal & Animal Derivatives	Yes	
Beef & Beef Derivatives	Yes	
Pork & Pork Derivatives	Yes	
Lamb/ Mutton & Lamb/ Mutton Derivatives	Yes	
Poultry & Poultry Derivatives	Yes	
Mechanically Recovered Meat	Yes	
Textured Vegetable Protein (TVP)	Yes	
Hydrolysed Vegetable Protein (HVP)	Yes	
Additives	Yes	
Natural Colours	Yes	
Artificial Colours	Yes	
Azo Dyes	Yes	
Natural Flavourings	Yes	
Flavouring Substances	Yes	
Flavour Enhancers	Yes	
MSG	Yes	
Artificial Preservatives	Yes	
BHA	Yes	
BHT	Yes	
Emulsifiers	Yes	
Stabilisers	Yes	
Artificial Sweeteners	Yes	
Sugar	Yes	
Molasses	Yes	
Maltodextrin	Yes	
Salt	Yes	
Salt Substitutes	Yes	
Irradiated Ingredients	Yes	
Genetically Modified Material	Yes	
Product Suitability	Yes/No	Comments
Coeliac	Yes	
Lactose Intolerance	Yes	
Vegetarian	Yes	
Vegan	Yes	
Organic	No	
Halal	No	Not Certified
Kosher	No	Not Certified

NUTRITIONAL INFORMATION

Information is based on values from McCance and Widdowson's Composition of Foods, 6th Edition, values for Spinach, raw.

	Per 100g	Per 80g Portion	% RI* Per 80g Portion
Energy	121kJ / 29kcal	97kJ / 23kcal	1.2%
Fat	0.8g	0.6g	0.9%
of which			
- saturates	0.1g	0.1g	0.5%
- mono-unsaturates	0.1g	0.1g	
- polyunsaturates	0.5g	0.4g	
Carbohydrate	1.6g	1.3g	0.5%
of which			
- sugars	1.5g	1.2g	1.3%
- starch	0.1g	0.1g	
Fibre	2.1g	1.7g	
Protein	2.8g	2.2g	4.4%
Salt	0.35g	0.28g	4.7%

*Reference Intake (Adults)

Energy	8400kJ / 2000kcal
Total Fat	70g
Saturates	20g
Carbohydrate	260g
Sugars	90g
Protein	50g
Salt	6g


Vitamins & Minerals

	Per 100g	Per 80g Serving	% NRV** per 80g serving
Vitamin A	589µg	471µg	59%
Vitamin C	26mg	21mg	26%
Folate/ Folic Acid	114µg	91µg	45%
Calcium	170mg	136mg	17%
Iron	2.1mg	1.7mg	12%
Zinc	0.7mg	0.6mg	6%

**Nutrient Reference Value

AMENDMENTS AND UPDATES

Details of changes	Date of Amendment	New Version Number
First issue in this format (EJ)	18/02/09	001
Updated nutritional data (KB)	05/10/11	002
Revised & updated	1/5/12	003
Revised & updated nutritional data	05/08/14	004

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WARRANTY


We warrant that this product, intended for food use will meet the requirements of Acts, Regulations and Orders applicable in the United Kingdom relating to the goods supplied, including but not necessarily limited to the following:

The Food Safety Act 1990 and all relevant Regulations and their amendments.

The Food Hygiene (England) Regulations 2006 and all relevant amendments.

The Materials and Articles in Contact with Food (England) Regulations 2005 and all relevant amendments.

All regulations made as a result of the requirements of European Union Directives and Regulations.

Document Control and review		
Approved by: 	Document reference: 3.6 Specifications	Created on: 05/08/14 Issue 4
1 st Document Review Due 05/08/15	2 nd Document Review Due: 05/08/16	3 rd Document Review Due: 05/08/17
Re-approved by:	Re-approved by:	Re-approved by:
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