



ARDO UK LTD PRODUCT SPECIFICATION

Blueberries (Wild)

| | |
|----------------------------|-------------|
| Spec ID | 4741 |
| Date of first issue | 24/05/04 |
| Version Number | 006 |

PACK SIZES

| Ardo UK Code | Ardo Article Code | Pack Size | Cases per Pallet |
|--------------|-------------------|-----------|------------------|
| 036100 | | 12 x 500g | 140 |
| 036101 | | 4 x 2.5Kg | 81 |
| 4741100 | | 1 x 10Kg | 64 |
| 474130P | N/A | 30lbs | 70 |

GENERAL DESCRIPTION OF MATERIAL

Quick frozen Blueberries prepared from fresh clean, sound berries by cleaning, processing and freezing in accordance with good commercial practice. The dimensions of the berries should be:

Nominal diameter 6.5mm

The berries should be frozen free flowing and should possess a clean, delicate natural flavour of Blueberry, with no off flavours present. The Blueberries should exhibit a consistent ripe dark purple/black colour with little variation. The texture of the berries should be good with all berries firm but succulent. Stalks should be absent in a given sample of Blueberries.

SIZE SPECIFICATION

| | TARGET | TOLERANCE |
|-----------|--------|-----------|
| LENGTH | N/A | N/A |
| THICKNESS | N/A | N/A |
| WIDTH | N/A | N/A |
| DIAMETER | 6.5mm | 3-9mm |

INGREDIENT DECLARATION

Blueberries (100%)

DEFINITION OF DEFECTS

Foreign Matter (FM) - Any matter not derived from the Blueberry plant, e.g. insects, wood, stones, glass, metal, toxic vegetable matter which will render the product unacceptable.

Foreign Extraneous Vegetable Matter (FEVM) - Any vegetable matter not originating from the Blueberry plant and which is non-toxic.

Extraneous Vegetable Matter (EVM) - Any vegetable material originating from the Blueberry plant, other than the berries.

Colour - Blueberries should possess a good dark purple/black colour, typical of the variety or varieties used as per contract, with little variation in a given sample.

Major Blemish - Insect infestation, rotten area or area of damage affecting 33% or more of a berry.

Minor Blemish - As for major blemish but affecting between 20% and 33 % or more of a berry.

Damaged Berries - Berries that are not whole or complete through natural or mechanical damage or damage of other sorts.

Oversize Berries - Berries that are greater than 9mm in diameter.

Undersize Berries - Berries that are less than 3mm in diameter.

Stalks (attached or loose) - These should be absent in a given sample of Blueberries.

Flavour - The berries should exhibit a flavour typical for the variety or varieties used as per contract.

TOLERANCES FOR DEFECTS

Defects assessed on a 1000g sample - (Frozen)

| | <u>A Grade</u> |
|-------------------------|----------------|
| Foreign Matter | 0 |
| FEVM | 0 |
| EVM (number) | 2 |
| Colour | Good |
| Major Blemish (% w/w) | 5% |
| Minor Blemish (% w/w) | 7% |
| Damaged Berries (% w/w) | 5% |
| Oversize units (% w/w) | 5% |
| Undersize units (% w/w) | 5% |
| Stalks (number) | 5 |
| Flavour | Good, typical |

ORGANOLEPTIC

APPEARANCE: Blueberries should exhibit a consistent ripe dark purple/black colour with little variation

AROMA: Clean, delicate natural aroma of Blueberry, with no off odours present

FLAVOUR: Clean, delicate natural flavour of Blueberry, with no off flavours present

TEXTURE: Texture of the berries should be good with all berries firm but succulent.

COUNTRY OF ORIGIN

USA, Canada, Poland

SHELF LIFE AND STORAGE DETAILS

Shelf Life: 18 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: MMMYYYY
 Batch Coding: XXYDDD: where of XX relates to factory code;
 Y is the year; DDD is the Julian date code

ADDITIVES AND PROCESSING AIDS

Chlorinated Water used for washing at 2ppm
 Product does not contain any Additives.

MICROBIOLOGICAL SPECIFICATION

| | n | c | m | M |
|-------------------------------|----------|----------|------------|----------|
| Total Viable count | 5 | 2 | 50000/g | 500000/g |
| Coliforms | 5 | 2 | 500/g | 1000/g |
| E.coli | 5 | 2 | 10/g | 50/g |
| Yeast | 5 | 2 | 5000/g | 50000/g |
| Moulds | 5 | 2 | 1000/g | 10000/g |
| Listeria monocytogenes | 5 | 1 | 10/g | 100/g |
| Salmonella | 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 |
|--------------------------------|

| Product Free From | Contains | Comments/ Source |
|----------------------------------------------------|----------|------------------|
| Cereals containing Gluten | | |
| Barley & Barley Derivatives | No | |
| Kamut & Kamut 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 & Molluscs Derivatives | No | |

| Product Free From | Yes/No | Comments |
|-----------------------------------------|--------|-------------|
| Oil Refined to SCOPE | Yes | |
| Oil Not Refined to SCOPE | Yes | |
| Maize/ Corn & Derivatives | Yes | |
| Rice & Rice Derivatives | Yes | |
| Spices & Spice Extract | Yes | |
| Herbs & Herb Extract | Yes | |
| Yeast & Yeast Extract | Yes | |
| Fruit & Fruit Derivatives | No | Blueberries |
| Vegetable & Vegetable Derivatives | Yes | |
| 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 | |
| Nature Identical Flavourings | Yes | |
| Artificial Flavourings | 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 | |
| Ovo-lacto vegetarians | Yes | |
| Vegan | Yes | |
| Organic | No | |
| Halal | No | |
| Kosher | No | |

Signed: 
 Position: Technologist

Name: Emma James
 Date: 15/3/10

NUTRITIONAL INFORMATION

Information is based on values from Mc Cance and Widdowson's Composition of Foods, Electronic Version 2.3.9. Values for Bilberries

| | Per 100g | Per 80g Serving | Percentage of GDA* based on women |
|--------------------------|----------|-----------------|-----------------------------------|
| Energy kJ | 135 | 108 | |
| Energy Kcal | 32 | 25 | 1.3% |
| Protein | 0.6g | 0.5g | 1.1% |
| Carbohydrate | 6.9g | 5.5g | 2.4% |
| Of which sugars | 6.9g | 5.5g | 6.1% |
| Of which Starch | 0g | 0g | |
| Fat | 0.2g | 0.2g | 0.2% |
| Of which Saturates | Trace | trace | 0.04% |
| of which Monounsaturated | 0.1g | 0.1g | |
| of which Polyunsaturated | 0.1g | 0.1g | |
| Fibre | 1.8g | 1.4g | 6.0% |
| Sodium | 3.0mg | 2.4mg | 0.1% |
| Salt Equivalent | 7.5mg | 6.0mg | 0.1% |

Guideline Daily Amounts

| | Women | Men | Children (5-10yrs) |
|-------------------|-------|------|--------------------|
| Energy Kcal | 2000 | 2500 | 1800 |
| Protein | 45g | 55g | 24g |
| Carbohydrate | 230g | 300g | 220g |
| Of which Sugars | 90g | 120g | 85g |
| Fat | 70g | 95g | 70g |
| Of which Saturate | 20g | 30g | 20g |
| Fibre | 24g | 24g | 15g |
| Sodium | 2.4g | 2.4g | 1.6g |
| Salt | 6g | 6g | 4g |

Vitamins & Minerals

| | Per 100g | Per 80g Serving | RDA | Percentage RDA per 80g serving |
|--------------------|-----------------|------------------------|------------|---------------------------------------|
| Vitamin A | 5.0µg | 4.0µg | 800 µg | 0.5% |
| Vitamin C | 17.0mg | 13.6mg | 60 mg | 22.7% |
| Folate/ Folic Acid | 6.0µg | 4.8µg | 200 µg | 2.4% |
| Calcium | 12.0mg | 9.6mg | 800 mg | 1.2% |
| Iron | 0.5mg | 0.4mg | 14mg | 2.9% |
| Zinc | 0.2mg | 0.2mg | 15 mg | 1.1% |

AMENDMENTS AND UPDATES

| Details of changes | Date of Amendment | New Version Number |
|----------------------------|--------------------------|---------------------------|
| First issue in this format | 18/9/08 | 005 |
| Revised & updated | 15/3/10 | 006 |
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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 Regulation's 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.

| | Accepted on behalf of | Accepted on behalf of Customer: |
|---------------|-------------------------------------------------------------------------------------|----------------------------------------|
| Company Name: | Ardo UK Ltd | |
| Signed |  | |
| Position | Technologist | |
| Date | 15/3/10 | |

Please return a signed copy of this page to the Ardo UK Ltd Technical Department

| Document Control and review | | |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Approved by:  | Document reference: 3.7.2 Specifications | Created on: 15/03/10 Issue 6 |
| 1 st Document Review Due 15/3/11 | 2 nd Document Review Due: 15/3/12 | 3 rd Document Review Due: 15/3/13 |
| Re-approved by: | Re-approved by: | Re-approved by: |
| Controlled copy if red | | |