

	PRODUCT SPECIFICATION	number: 2029 initials: RD date: 12/06/2024
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IQF blueberries cultivated

1. Description

Product description	Quick-frozen blueberries
Process description	Quick-frozen Blueberries are prepared from fresh clean, sound berries of species <i>Vaccinium corymbosum</i> by an appropriate cleaning, processing and freezing process to ensure stability of colour and flavour. The product shall not be glazed. Product temperature shall be lower than -18°C.
Latin name	<i>Vaccinium corymbosum</i> variety <i>Highbush</i>
Dimensions	<u>size</u> >12mm
Ingredient	100% Blueberry
Vegetarian/vegan information	The product is suitable for vegetarians and vegans.
Organic	Not applicable

2. Microbiological standards (cfu/g)

	<u>MAXIMUM</u>
Total aerobic mesophile plate count	500.000
<i>Enterobacteriaceae</i>	1.000
<i>Escherichia coli</i>	100
<i>Listeria monocytogenes</i>	absent/25g
<i>Yeasts</i>	50.000
<i>Moulds</i>	10.000
<i>Salmonella</i>	absent/25g

3. Chemical standards

Heat treatment	No heating process
Pesticides	in accordance with EC regulation 396/2005 and its modifications
Heavy metals, mycotoxins and nitrates	in accordance with EU regulation 2023/915 and its modifications
GMO	the product is free from GMO, according to the EC regulations 1829/2003 and 1830/2003 and its modifications
Irradiation	the product is not irradiated

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4. Sensorial standards

	Per 200 g
Colour	Glossy appearance with a deep-purple to dark-blue colour with little variation.
Flavour/Odour	Clean, delicate, natural flavour/aroma of blueberries, no off flavours/odours
Texture	Uniform, firm and succulent

5. Average nutritional values

	per 100 g	unit	% RI* per 100 g	RI*
Energy	189	kJ	2%	8400
Energy	45	kcal	2%	2000
Fat	0,2	g	< 1%	70
of which saturates	0,0	g	< 1%	20
Carbohydrate	9,1	g	4%	260
of which sugars	9,1	g	10%	90
Fibre	1,5	g	-	-
Protein	0,9	g	2%	50
Salt	0,01	g	< 1%	6

*Reference intake of an average adult (8400 kJ / 2000 kcal)

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6. Allergen information

Allergens according to the EU Regulation 1169/2011 and its modifications:	
	Product contains (+) or is free from (-)
Cereals containing gluten, namely: wheat, rye, barley, oats, spelt, kamut or their hybridised strains, and products thereof; except: 1/ wheat based glucose syrups including dextrose, 2/ wheat based maltodextrins, 3/ glucose syrups based on barley, 4/ cereals used for making alcoholic distillates including ethyl alcohol of agricultural origin.	-
crustaceans and products thereof	-
eggs and products thereof	-
fish and products thereof; except: 1/ fish gelatine used as carrier for vitamin or carotenoid preparations, 2/ fish gelatine or Isinglass used as fining agent in beer and wine	-
peanuts and products thereof	-
soybeans and products thereof; except: 1/ fully refined soybean oil and fat, 2/ natural mixed tocopherols (E306), natural D-alpha tocopherol, natural D-alpha tocopherol acetate, natural D-alpha tocopherol succinate from soybean sources, 3/ vegetable oils derived phytosterols and phytosterol esters from soybeans sources, 4/ plant stanol ester produced from vegetable oil sterols from soybean sources	-
milk and products thereof (including lactose); except: 1/ whey used for making alcoholic distillates including ethyl alcohol of agricultural origin, 2/ lactitol	-
nuts i.e. almonds, hazelnuts, walnuts, cashews, pecan nuts, brazil nuts, pistachio nuts, macadamia nuts and queensland nuts and products thereof; except: nuts used for making alcoholic distillates including ethyl alcohol of agricultural origin	-
celery and products thereof	-
mustard and products thereof	-
sesame seeds and products thereof	-
sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO ₂	-
lupin and products thereof	-
molluscs and products thereof	-
contains naturally sulphites	-

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7. Definitions of defects

Defect	Definition
Foreign Matter (FM)	This includes any material not derived from the plant nor defined as FEVM. Examples of foreign matter include insects, pieces of insects, wood, glass, mineral stones, metal, snails, slugs, toxic vegetation etc.
Foreign Extranious Vegetable Matter (FEVM)	This includes any vegetable material not derived from the plant, and which is non-toxic. Examples are stalk pieces, leaves or pods,...
Extranious Vegetable Matter (EVM)	This includes any extraneous vegetable material derived from the plant, this includes leaf, leaf pieces, tendrils, pieces of pods, loose stems, twins, clusters, pieces of plants,...
Undersize < 12 mm	This includes units with a diameter < 12 mm.
Oversize > 20 mm	This includes units with a diameter > 20 mm.
Damaged	This includes product which is bruised, crushed, broken or cut through natural or mechanical damage or damage of other sorts.
Rot/decay/mould	Discoloured or decomposed units through the action of bacteria or fungi.
Major blemishes > 33% surface	This includes product which is blemished on more than one third of the surface.
Minor blemishes < 33% surface	This includes product which is blemished on less than one third of the surface.
Stalks	This includes attached or loose stalks in the product.
Clumps / Freezer Burn	Three or more pieces that are clustered that can't be separated without causing damage. This includes excessive frost on the product.
Colour / immaturity Level 1A/1B/2B	The colour of the units shall be deep purple to dark blue that may range in intensity but will be reasonably uniform throughout the load (depending on the country of origin and variety). Isolated paler units are acceptable if within the tolerance. Level 1A, 1B and 2B (see pictures in attachment) are acceptable if within the specified tolerance.

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Colour / immaturity Level 2A/3A/3B/4A/4B	The colour of the units shall be deep purple to dark blue that may range in intensity but will be reasonably uniform throughout the load (depending on the country of origin and variety). Isolated paler units are acceptable if within the tolerance. Level 2A, 3A, 3B, 4A and 4B (see pictures in attachment) are unacceptable colouration.
Shrivelled Level 2 and level 3	Wrinkling of the skin. Usually caused by dehydration and/or over-maturation. Pictures of level 2 and level 3: see attachment.
Shrivelled Level 4	Wrinkling of the skin. Usually caused by dehydration and/or over-maturation. Picture of level 4: see attachment.

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Defect (*)	Sample size	UOM	MAXIMUM
Foreign Matter (FM)	1000g	pcs/1000g	Appropriate measures are taken to avoid FM
Foreign Extranious Vegetable Matter (FEVM)	1000g	pcs/1000g	Appropriate measures are taken to avoid FEVM
Extranious Vegetable Matter (EVM)	1000g	pcs/1000g	2
Undersize < 12 mm	1000g	g/1000g	50
Oversize > 20 mm	1000g	g/1000g	50
Damaged	1000g	g/1000g	50
Rot/decay/mould	1000g	pcs/1000g	0
Major blemishes > 33% surface	1000g	g/1000g	30
Minor blemishes < 33% surface	1000g	g/1000g	50
Stalks	1000g	pcs/1000g	5
Clumps / Freezer Burn	1000g	g/1000g	50
Colour / immaturity Level 1A/1B/2B	1000g	pcs/1000g	5
Colour / immaturity Level 2A/3A/3B/4A/4B	1000g	pcs/1000g	0
Shrivelled Level 2 and level 3	1000g	g/1000g	30
Shrivelled Level 4	1000g	g/1000g	0

(*) Apart from the mentioned physical defects, all our products are in compliance with EU legislation and legislation from specific EU countries (example CTCPA from France)

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9. Preparation instructions

Defrost at room temperature ($\pm 2,5h$) or in the refrigerator ($\pm 8h$). Rapid defrosting is possible by microwave on defrost mode. Once defrosted keep refrigerated and consume within 24 hours.
Do not refreeze after defrosting.

10. Storage instructions

-18°C, see BBD

11. Packing information

See packing specification

12. Approval

	Approved on behalf	Approved on behalf of:
Company name:	Ardo Group	
Name:	Ruth Demuynck	
Function:	Product Specification Lead	
Date:	12/06/2024	
Signature:		