

General description

Product name	Frozen strawberry
Product definition	Quick frozen strawberries are the product prepared from fresh, clean, ripe and stemmed strawberries of firm texture conforming to the characteristic of <i>Fragaria grandiflora</i> L. or <i>Fragaria vesca</i> L.
Process definition	Quick frozen strawberries are the product subjected to a freezing process in appropriate equipment and complying with the conditions laid down hereafter. This freezing operation shall be carried out in such a way that the range of temperature of maximum crystallization is passed quickly. The quick freezing process shall not be regarded as complete and until the product temperature has reached -18°C (0°F) at the thermal center after thermal stabilization. The recognized practice of repacking quick frozen products under controlled conditions is permitted.
Ingredients	100% Strawberry
Country of origin	Egypt
Variety	Various (Festival, Fortuna, Florida)
Intended uses	All food applications such as: juices, slices, cubes
Product composition	Product made of 100% natural fruits

Physical properties

Test	Standard test range
Brix	5:11 (20°C)
Acidity	0,6-1,2% Citric acid (pH 8,1)
pH	3,1-3,5 (20°C)
Size	The difference between the larger diameter and smaller diameter is 10 ml
Oxidative enzymes	Oxidized Pieces N/A
Ash	Do not exceed 1,5% (dry weight)

Organoleptic properties

Appearance	Quick frozen strawberries shall be presented as whole, halved, sliced or cut
Colour	Red, (good colour), typical from the variety
Flavour, taste	Typical and fresh taste, free from foreign flavour, no moldy or off notes

Chemical properties

Pesticides residues	Conform to current EU MRL regulation
Heavy metal residues	In accordance with regulation EC 78/2005, 2006-1181,629/2008
Allergens	Allergen free in accordance with the requirements of 2003/89 CE of 20-11-2006 modified by the commission Directive 2006/142/CE of 22-12-2006

Allergens

1.	Cereals containing gluten and products thereof (i.e. wheat, rye, barley, oats, spelt, kumat)	No
2.	Crustaceans and products thereof	No
3.	Eggs and products thereof	No
4.	Fish and products thereof	No
5.	Peanuts and products thereof	No
6.	Soybeans and products thereof	No
7.	Milk and products thereof (including lactose)	No
8.	Nuts and products thereof (almond, hazelnut, walnut, cashew, peanut, brazil nut, pistachio nut, queensland nut)	No
9.	Celery and products thereof	No
10.	Mustard and products thereof	No
11.	Sesame seeds and products thereof	No
12.	Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/l, expressed as SO ₂	No
13.	Lupin and products thereof	No
14.	Molluscs and products thereof	No

Microbiology properties

Test	Upper limit value which cannot be exceeded	Reference
Total plate count	<100,000 c/gm	ISO: 4833/2013 part 2
Coliforms	<100 c/gm	ISO-CD-4832-2006
<i>E. coli</i>	Absent	ISO: 16649-2-2001 part 2
Yeasts and moulds	<50 c/gm	ISO: 21527-1-2008 part 1
<i>Staphylococcus</i>	Absent	ISO: 6888-1 part 1
<i>Salmonella</i>	Absent	ISO: 6579-2002

When tested by appropriate methods of sampling and examination, the product:

- Shall be free from microorganisms in amounts which may represent a hazard to health
- Shall be free from parasites which may represent the hazard to health
- Shall not contain any substance originating from microorganisms in amounts which may represent a hazard to health

Defects per 1 kg

Defects	Value
1- Completely uncoloured (75% or more of the other Surface area without the colour characteristic of the variety)	1 by number
2- Stalks or parts of stalks (if each greater than 3 mm in one)	3 by number
3- Partially uncoloured (25-75% of the outer surface area without the colour characteristic of the variety)	5% w/w
4- Disintegrated (broken, crushed or smashed)	5% w/w
5- Blemished (showing visible signs of pest attack or pathological or physical injury)	5% w/w
6- Misshapen (not normally developed and more in particular containing hard parts in the fruit flesh)	2% w/w
7- Dissimilar varieties	6% w/w
8- Form/size	The difference between the larger diameter and smaller diameter is 10ml. Tolerance 10% by weight Diameter of less than 15 mm: tolerance shall not exceed 5% by number

Foreign material (endogenous and exogenous)**9- Twigs and exogenous vegetable foreign bodies**
(grass, flowers, seeds)

Not allowed

10- Critical harmful foreign bodies
(glass, metal, mineral, Stones, hard plastic, wood pieces)

Not Allowed

11- Other endogenous vegetable bodies linked to the environment of the fruit
(sand, soil, soft plastic, paper cardboard)

Not allowed

12- Calyx, leaves residuesCalyx 4 pieces <10 mm²
Leaves 4 pieces <10 mm²
No leaves >10 mm²**13- Insect injury, fungus injury**
(insect not easily detected during sorting, insects living inside the fruit, worms, Larva, insect eggs)

Not allowed

14- Under ripe, green
(more than ¼ of the surface different from the one characteristic of well ripened fruits)

<2% w/w

15- Over ripe/mushy fruits (texture, firmness)
Must be measured before frozen

<2% w/w

16- Clumps of more than pieces

<1%

- Total defects maximum 5%**Packing, storage condition and shelf life**

Packaging size 400 g, 10 kg

Type of packaging Corrugated cartons with polyethylene liner

Storage temperature -18°C

Shelf life 18 months (ES) – 24 months (EU)

Transport condition Floor-loading or on the euro pallets, fumigated (corresponding label on the tray)
All kinds of transport>transport should be clean, without foreign smells.
Temperature not above -18°C. The transport not above -18°C. The transportation with non-foody products is not allowed.

Special conditions Refreezing and defrosting is not allowed.

Marking Product name, net weight, expiry date, units per case, production code, contact details.
Do not refreezing after defrosting.