

 <p>FRATELLI MARIANI di MARCELLO MARIANI & C. S.a.s. Zona Industriale – 01030 CANEPINA VT ITALY www.marianigroup.com</p> <p>© 2008 Fratelli Mariani . All rights reserved. “FIOCCO di BOSCO “ and fiocco di bosco logo are registered trademarks. The reproduction not authorized of this specification is prohibited.</p>	<p><i>Fiocco di Bosco®</i></p> <p>DEEP FROZEN ROASTED CHESTNUTS IQF</p> 	<p>Product Specification</p> <p>Item: FDB 2000</p> <p>DATE: 9.01.2008</p>
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1- Description

The product is obtained from fresh chestnuts, collected to maturation, calibrated, cleaned up, roasted and frozen IQF. The product is supplied to CATTEL CATERING SPA packed in FIOCCO di BOSCO® 2 kg polybag / 3 pieces in each carton X 81 cartons on each Eur Pallet

2- Ingredients

Chestnuts , FIOCCO di BOSCO selection.

3- Preparation guidelines

To get the true woodland taste put the product (right quantity), still frozen, in already warm oven at 200° C for approximately 8-10 minutes or in a microwaves oven for 3 minutes. Peel before eating.

4- Composition

Ingredient	%	Species	Description
Roasted Chestnut	100	Sativa Castanea Tardy varieties	Whole, calibrated, cutted on the peel and roasted fruits

5- Weights, measures, defective state, tolerances

Net weight U.V.	2 kg.
Single roasted fruit weight	10g. +/- 1g
Chestnuts with attacks from infesting	max 2% p/p
Chestnuts with burnt parts: black > 30 % of the surface of the fruit	max 2% p/p
Mould < 20 % of the surface of the single piece	max 4% p/p
Mould < 50 % of the surface of the single piece	max 2% p/p
Bodies strangers of whichever nature	absent

* =The average of the control values must coincide with the above-stated value (the standard shunting line is represented by the interval of oscillation of tolerance on such data).

6- Organoleptic characteristics

General aspect

Chestnuts with the peel, cutted on peel surface and roasted.

Characteristic aspect, with blackened areas on the peel and browned areas on the pulp. Absence of fruits with blackened pulp beyond the limits previously expressed. The product appears homogenous for aspect, colour and dimensions.

Colour

Dark brown peel with black areas. Yellow-golden, shining pulp. With shadings from light brown to dark brown due to the roasting process. Eventual blackened areas of pulp : like already expressed previously.

Smell/Taste

Typical of roasted chestnuts, sweet and pleasant

Consistence

Firm, slightly crisp.

7 – NUTRITIONS FACTS

Medium values per 100 g of product

Carbo-hydrates	42.8 g
Of wich sugars	6.7g
Proteins	3.7 g.
Fats	2 g.
Of wich saturates	0.4g
Energy	166kcal
Fibre	6.8g
Sodium	Trace
Cholesterol	No level

8-Technology of production

Operation	Equipment	Characteristics
Picking to maturation	Manual; period : 1 st / 2 nd October, Varieties : tardy	At the spontaneous opening of the husks the fruits are picked up from the ground
Stop for the product in mass soon after the picking if Qin > Qout	Bins of 300 kg	Store at 4+ °C , at a constant temperature and humidity
First Selection	Manual	Elimination of fruits with mildew, pierced, and foreign matter.
Gauging	Cylindrical pierced rotary sieves	100 fruits / Kilo roasted
Cleaning	Exhaust fans	Elimination of the fragments of gauging
Incision	Automatic LASER cutter machine	100 % of pieces
Roasting	Electric furnace (2 furnaces) on pierced strap	T=300°C.
Deep-freezing	IQF by azote	Final temperature “At the core” < -20 °C
Metal detecting	Automatic metal detector	
Packing	Big boxes of 300 Kg	Direct unloading from the deep-freezer
Storing	In cold store	T< -18 °C

9-Chemical-physical characteristics

Dry residue	70 % min.
Lipides	2 % max.

10-Microbiological characteristics

		m	M	C
(1)- Total mesofila count out	ufg/g	<100000	<300000	2
(2)- Total coliformi	“	<100	<1000	2
(3)- E. Coli	“	<5	<10	2
(4)- Staphilococcus aureus	“	<100	<500	2
(5)- Listeria monocitogenes	“	absent	absent	/
(6)- Salmonella		absent	absent	/
Ufc/25 g				

Legenda : m=standard; M(max) = 10 m ; n = 5 (numbers of analysed samples) ; c= number of samples with microbic charge included between m and M.

Materials and methods

- (1)-Plate count agar at 37 °C for 24 hours or at 32° C for 48 hours
- (2)-Violet red bile acar at 32° C for 24 hours
- (3)-Violet red bile agar + mug at 32° C for 24 hours
- (4)-Baird Parker + egg yolk tellurite emulsion at 37° C for 43 hours
- (5)- Enrichment in Listeria Enrichment Broth at 30° 'C for 24 hours; insulation in Oxford Agar at 32° C for 24 hours;
- (6)-Pre-enrichment in Buffered Peptone Water at 44° C for 24 hours; selective enrichment in Rappaport Vassilisdis Broth at 42°C for 24 hours; insulation in Hektoen Agar and Rambach Agar at 42°C for 24 hours; identification of the suspect colonies with Enterotube or API 20 E.

11- Legal wordings : For the final consumer, according to : D.L.27/0 1/92 ,n. 109 ; (on the confection) L.25/10/78, n.690 and D.M. 27/2/79; DL-27/01/92, n. 110; to D.L. 30/12/92, n. 531; D. MM. 15/07/83 and the successive adjournments.

12- Minimal term of conservation : 24 months from the date

13-Storing and transport temperature : The product must uninterruptedly be maintained to temperature $\leq - 18^{\circ} \text{C}$

14-Controls and frequencies : Reference to the self-control instituted in the plant , HACCP manual.

15-General conditions : The product must be suitable in all its aspects to human alimentary use and must turn out in compliance with all the enforced norms in matter, also for what is not specifically brought back.

**The present detailed list must be considered confidential document.
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