

 <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 PEELED SWEET CHESTNUTS IQF</p>	<p>Product Specification</p> <p>Item: 898</p> <p>Release:2.3</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, peeled and frozen IQF. The product is supplied to CATTEL CATERING SPA into FIOCCO di BOSCO® 2kg bag / 3 pieces in each carton x 81 cartons on Eur pallet.

2- Ingredients

Sweet Chestnuts , FIOCCO di BOSCO® selection.

3- Preparation guidelines

A precious ingredient for hundreds of delicious recipes: entrées and main dishes, stuffed and pastry. To get the true woodland taste put the product (right quantity), still frozen, in already warm oven at 200° C for approximately 8 minutes or in a microwaves oven for 2-4 minutes. Use immediately when thawed. You can also boil them still frozen in hot, slightly salted water for maximum 10 minutes.

4- Composition

Ingredient	%	Species	Description
Peeled Chestnut without peel	100	Sativa Castanea Tardy varieties	Whole, calibrated and peeled fruits

5 - Nutritional Information

This data conforms with the requirements of EC council Directive 90/496/EEC

100g of uncooked Peeled by steam Sweet Chestnuts	
Energy	157 kcal
Carbohydrate	30.9g
as sugars	6.4g
Fat	1.8g
as saturates	0.4g
Protein	2.3g
Fibre	4.1g

6- Organoleptic characteristics

General aspect

Chestnuts without the peel.

Characteristic aspect, with yellow ivory pulp. The product appears homogenous for aspect, colour and dimensions.

Colour

Ivory Yellow, shining pulp.

Smell/Taste

Typical of uncooked chestnuts, sweet and pleasant

Consistence

Firm, slightly crisp.

7-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 $Q_{in} > Q_{out}$	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	
Cleaning	Exhaust fans	Elimination of the fragments of gauging
Peeling	By steam	T= 120°C
Deep-freezing	Tunnel line IQF by azote	Final temperature "At the core" < -20 °C
Metal detecting	Automatic metal detector	Direct unloading from the deep-freezer
Packing	Big carton boxes of 400 Kg	T< -21 °C
Storing	In cold store	

8-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	“	absent	absent	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.

- 10-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 succesive adjournments.

- 12- Minimal term of conservation :** 24 months from the date
- 13-Storing and transport temperature :** The product must uninterruptedly be maintained to temperature $\leq - 21^{\circ} \text{C}$
- 14-Controls and frequencys :** 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 final product detailed here above, does not contain any additive and no additive was used before and during the whole production process

The present detailed list must be considered confidential document.

Copy to give back countersigned.