

Dulce de Leche - Product specification sheet

Product name: Dulce de leche La Paila - Heladero
Code: 401
Description: Dulce de Leche made principally of Bovine Milk and cane Sugar

Dulce de leche specs update: 05/02

List of ingredients in descending order:

<u>Ingredient</u>	<u>%</u>	<u>Country of origin</u>
Bovine Milk (3.5 % Fat milk)	75.5	Argentina
Cane Sugar	16.2	-
Dextrose monohydrate	4.31	-
Glucose (syrup)	3.66	-
Sodium Bicarbonate	0,25	-
Sodium clorure	0,08	-
Artificial colouring.	Traces	-

Does not contain preservatives

Product description:

Appearance:

Dulce de leche is a caramel spread of dark brown colour, consisting principally of a mixture of milk and cane sugar that in the vast array of dairy products, Dulce de Leche belongs to the chapter of milk conserved by evaporation and concentration .

Taste:

Sweet. Creamy flavour with an agreeable aftertaste.

Texture:

Semi solid, very spreadable.

Smell:

Caramel.

Product life and storage

Shelf life of product from production: 12 months
Shelf life of product once opened: refrigerated 12 months
Storage conditions: ambient
Storage conditions once opened: must be refrigerated

Batch Codes:

Coding information contains Day, Month, Year and Batch of fabrication printed rim of lid.

Nutritional and analytical data:

<u>Component</u>	<u>Average values per 100 g</u>
Total solid/dry matter (g)	74
Total moisture (g)	26
Protein (g)	5,3
Total fat (g)	6

Total carbohydrates (g)	60.8
Sodium [Na] (not salt) (g)	0,13
Fibre (g)	Less than 0,1
Energy - Kj	1332
Energy - Kcal	318

	Target	Min.	Max.	Frequency of testing	Method used
aw (water activity)	0,83				
Brix (soluble solids)	74	73	75	Per batch	Refractometer
pH	6,2	6	6,4	Per batch	Electronic pHmeter

Microbiological Analysis

Yeast And Mold	Less than 10/g
Total Count Bacteria	Less than 100/g
Coliforms	Less than 10 /g
E. Coli Absence	1 /g
Salmonella Absence	25/g
Staph. aureus (Coagulase Positive)	Less than 10 /g

Dulce de leche “ La Paila” Description of elaboration Process:

The main ingredient of Dulce de Leche is Bovine Milk that is produced exclusively on our farm, assuring the tracking of this ingredient starting from the cow up to the final product.

The milk that is used in the elaboration has to attain stringent sanitary and quality parameters that are monitored by the National Animal Health Department (SENASA).

- Free from antibiotics.
- Less than 50.000 UFC/gr.
- Storage temperature 4°C.

The quality of the milk is the first CCP (critical control point) of our HACCP process. The aforementioned parameters are tested on a daily basis, we also test for butterfat content and Ph. The milk is filtered twice before it reaches the elaboration plant.

From the bulk tanks the milk is pumped to a double wall formulation vat ,In this vat the ingredients are added, and is added also the sodium bicarbonate, that neutralizes the natural acidity of the milk, and is vital for the Maillard reaction (caramelisation) to take place.

From this vat, the mixture is filtered (retaining particles of over 500_) and pumped to the double walled cauldrons that are heated by steam, these cauldrons have a double set of circular were the cooking and concentration process takes place. We can assure a core temperature of 104/105°C during 2 hours.

This thermal process is monitored twice per batch in order to assure that this temperature is attained. The advantage of dulce de leche is that if both variables (time & temperature) are not fulfilled , the resulting product is not dulce de leche.

Once the product reaches 73/74° Brix, we pump the product to the cooling vat where once its temperature drops down to 80° C it flows by gravity to our bottling facility. Previously it passes by a series of sieves and filters that retain particles of 500µ. From the cooling vat up to the filled jar, the dulce de leche has no possibility of contamination because it flows in an uninterrupted pipeline .

Our bottling machine is in a room with a controlled environment, the air is filtered, there are constant temperature and relative humidity conditions(20°C/45% rel.humidity) and the room is irradiated by UV reactors.

An important item that is monitored automatically is the temperature of the container at the moment of bottling, we target a temperature of 75°C.

The closed containers are transported by conveyor belt to the labeling area . Cross-contamination between the bottling and labeling areas is avoided because there is a difference of pressure between them so air can't pass between areas.

Weight control is monitored at this point ,the label and batch number and expiration date is put on the container automatically.