

# COU VER TURES

**ION**  
ΓΙΑ ΠΑΝΤΑ

## MILK



## USE

Product dipping (coating), preparation of cream and filling, decoration, ganache, preparation of glazing, shell for mini chocolates, integration of dried nuts (rocks).

## BOX

10 pack. x 2kg = 20kg

## RECOMMENDED CONDITIONS OF USE

Stocking: 22°C max., RH 70% max.

Melting: 40-45°C

Tempering: 40-45°C > 27-28°C > 30.5-31.5°C

Refrigeration: Moulded: 10-12°C

Refrigeration: Coated: 13-15°C

Stabilisation: 2-3h (16-18°C)

Storage: 25°C max., RH 60% max.

# BASIC INSTRUCTIONS FOR PROCESSING DARK AND MILK CHOCOLATE COUVERTURES

The proper processing of chocolate products is an absolute requirement for the truly excellent appearance (colour, sheen) and sustainability of products, and also for them to maintain their taste characteristics (flavour, aroma, texture).

It is a process that requires knowledge, experience, and above all, accuracy at every single stage.

## STORAGE

All chocolate products and chocolate drops must be stored in air-conditioned spaces (temperature 22°C max., relative humidity 70% max.), free from odours, insects, etc., from delivery until usage. All direct contact with sunlight must be similarly and equally avoided.

## MELTING

To facilitate melting, the product ought to be chopped into smaller pieces that will subsequently be placed in special containers (bain-marie / water-bather double-bottom containers) that prevent the chocolate from directly coming into contact with the heat source, or in a hot air or microwave oven.

**For proper melting:**

- The melting temperature of chocolate must be 40–45°C.
- The chocolate must be constantly stirred.
- The chocolate must be fully melted before advancing to the next stage.
- If it is necessary to add more chocolate to the melting container, you must wait for the added chocolate to melt fully before proceeding.

## TEMPERING (SPREADING)

Tempering is done by either placing the chocolate on a cold surface (usually marble), or with the aid of tempering machines.

**Tempering in marble:** Spread on the marble two thirds of the melted chocolate quantity, while continuing to stir. The melted chocolate ought to be spread as a thin layer with the use of a spatula until the temperature of the chocolate drops to 27–28°C (from 40–45°C) within a specified time limit. Immediately mix it with the remaining 1/3 of melted chocolate and continue to stir in order for the end temperature of the mix to reach 30.5–31.5°C.

**Tempering with automatic tempering machine:** If you are using an automatic tempering machine, follow the manufacturer's instructions and set the above-specified temperatures for melted chocolate, tempering and use.

**Important factors:**

- Temperature of marble and tempering area: 20–25°C.
- Relative humidity of tempering area: 65% max.
- We recommend using a thermometer for checking the temperature, in order to achieve maximum accuracy.
- If using an automatic machine, it is important to regularly check the accuracy of the machine's thermometers and to regulate the supply pump so the quantity of tempered chocolate returning to the melted chocolate container will remain at a minimum. The quantity of chocolate in the melted chocolate container must be adequate during operation (the container must be more than half-full).
- Successful tempering can also be checked through the tempermeter.

## MOULDING / COATING

**Moulding:** The moulding forms must be completely clean and dry and their temperature must be equal to that of the tempered chocolate. Prior to placing in the refrigerator, the forms must be shaken to evenly spread the chocolate and eliminate any potential air bubbles.

## COATING

### Coating by hand (dipping)

Once the tempering process is complete, the chocolate is placed in a container. All products to be coated must be dry and their temperature must be 23–25°C, and definitely not lower than 20°C (in cases where such products are stored in a refrigerator). Dip the products into the chocolate with the use of special utensils, remove any excess chocolate and place them in trays and afterwards in the refrigerator. The temperature of the chocolate must be kept at the initial levels because its tempering will be impaired if it freezes.

### Coating by machine

The machine must begin the coating process only after the chocolate is properly tempered, at temperatures similar to the ones indicated in the coating by hand method. All excess chocolate is removed afterwards by employing a regulated air system and the products are placed in the refrigerator.

### Coating of mini ice creams

All mini ice creams must be coated with chocolate (at a temperature of approximately 40°C) and placed in the freezer immediately afterwards.

## **FREEZING**

All moulded or coated products are placed in the refrigerator at temperatures of 10–12°C for moulded products and 13–15°C for coated products. In addition, air circulation in the refrigerator is recommended for moulded products (in order to evenly freeze the forms).

## **STORAGE**

Products made with genuine chocolate must be stored in air-conditioned spaces (temperature of 25°C, relative humidity at 60% max.) post-production, in order for them to maintain their qualities until consumption. It is also useful for such products to be stored at lower temperatures (16–18°C) during the first hours after they are processed in order to be stabilised.

# PROBLEMS THAT OCCUR DURING PROCESSING AND POSSIBLE CAUSES

## FAT BLOOM

- Error in processing temperature
- Chocolate not fully melted prior to tempering
- Chocolate improperly and ineffectively stirred
- Error in freezing temperatures
- Error in stocking conditions
- Addition of foreign fats in chocolate

## SUGAR BLOOM

- Very low freezing temperature
- High humidity in the chocolate processing area
- High humidity in the chocolate stocking area
- Presence of air bubbles in chocolate

## DISCOLOURED PRODUCTS

- Bloomed chocolate
- Low chocolate processing temperature
- Low freezing temperature
- Stocking of products in humid atmosphere

## THICKENING OF CHOCOLATE DURING PROCESSING

- Long processing time after tempering
- Humidity in chocolate

## BUBBLES IN CHOCOLATE

- Very low chocolate processing temperature
- High chocolate stirring speed
- High chocolate supply pump speed

## STRIPES IN THE SURFACE OF THE CHOCOLATE

- Error in coating conditions
- High speed and low air temperature
- Very thin chocolate layer