

# Macadamia Praline Chocolates

Macadamia kernel style

7/8

or paste



## Concept

Macadamia praline filling for chocolate



### Nut raw/roasted

Roasted



## **Processing method**

Shear or mill



### Shelf life

Long



## Thermal treatment suitability

Yes



## Nut recommended usage rate (%)

35%-40% paste with 35%-40% style 7 kernel in the praline filling



#### **MACADAMIA PRALINE CHOCOLATES**

Praline chocolates have their roots in European confectionery traditions, where a crisp chocolate shell encases a soft, flavoured centre. While classic versions often feature caramelised almond or hazelnut pastes, today's pralines span a broad range of textures and inclusions, from marzipan and salted caramel to coffee, cream liqueur and contrasting chocolate blends.

Macadamia praline brings a distinctively indulgent twist to this format. With its naturally buttery texture, creamy flavour and pale ivory hue, macadamia paste creates a smooth filling that contrasts beautifully with a dark or milk chocolate shell. It delivers a rich mouthfeel, enhanced by the nut's delicate roasted notes and subtle sweetness. The inclusion of finely chopped macadamias adds a gentle crunch, rounding out a layered sensory experience that makes macadamias a standout choice for premium praline chocolates aimed at discerning palates.



## **Formulation**

## **ADDITION RATE (%)**

Macadamia praline filling			
Ingredient	Description	Original	Biscoff® inspired
Macadamia paste	Roasted macadamia, style 7 or 8 milled in-house to paste or use pre-processed paste	39.20	36.00
Macadamia kernel	Kernel style 7 (roasted in-house at 145°C for 12 minutes)	40.00	36.00
White chocolate	White chocolate buttons	17.00	16.21
Glycerides	Mono-diglycerides, E 471	0.80	0.80
Salt	Fine cooking salt	0.50	0.50
Butter	Salted dairy butter	2.50	5.00
Sugar	Icing sugar	-	5.00
Flavour	Natural caramel flavour, oil soluble	-	0.04
Ginger	Ground ginger powder	-	0.10
Cinnamon	Ground cinnamon powder	-	0.15
Nutmeg	Ground nutmeg powder	-	0.10
Clove	Ground clove powder	-	0.10
Total		100.00	100.00

## **Processing flowchart**



## Combining macadamia praline with chocolate

**Option 1:** Deposit the praline filling into moulds, allow it to chill and set, then coat it with tempered chocolate. Cool again to fully crystallise. Apply a thin layer of shellac to give the chocolate a glossy, polished finish if required.

**Option 2:** Create a chocolate shell by moulding tempered chocolate into the mould cavity. Allow the shell to set, then deposit the praline filling into the shell. Seal the top with tempered chocolate and cool again to fully crystallise. Apply a thin layer of shellac to give the chocolate a glossy, polished finish if required.

### Shelf life

The macadamia praline is designed to be shelf stable with a 6-month shelf life at ambient temperature. To achieve the desired shelf life, water activity must be maintained below 0.65. In addition, pasteurisation is recommended to ensure a minimum 5-log reduction of pathogens. The recommended pasteurisation process is 100°C for 15 minutes, though adjustments can be made based on ingredient properties and the manufacturer's HACCP plan and capabilities.

**Note:** All guidelines presented are for research purposes and provide indicative data on achievable product shelf life pertaining to the formulation, packaging and processes provided. Commercial manufacturers are responsible for validating the product shelf life and processing parameters using their specific equipment and operating conditions.

## Recommended macadamia formats

- A combination of macadamia paste (either pre-processed or milled in-house from style 7/8 kernel) and style 7 macadamia kernel is used to achieve a soft praline base with crunchy nut pieces.
- Roasted paste and kernel are recommended to achieve a caramel colour and distinctive roasted macadamia taste.

## Recommended macadamia dosages

 It is recommended to incorporate 35-40% macadamia paste and 35-40% style 7 macadamia kernel in the praline filling.

## Macadamia treatment and evaluations

- Roasted macadamias deliver a richer caramel colour, and a more pronounced roasted flavour compared to raw macadamias.
- The texture of the praline filling can be adjusted by varying the ratio of macadamia to white chocolate: increasing the amount of white chocolate thickens the filling, while decreasing it results in a thinner consistency.
- Style 7 kernel add a desirable crunch to the filling and enhance the macadamia flavour in the chocolate.

## Manufacturing considerations for producing the praline

- The product can be manufactured in a kettle with a highshearing blade or using a mill.
- Ingredient selection must be carefully matched to the processing method to ensure product stability. Solid ingredients are preferred over liquid ingredients for maintaining stable emulsions under heat and intensive mixing.
- Ball-milling is the most effective method for grinding particulates into a smooth, fine texture.
- If thermal processing is applied, the product should be rapidly cooled to ambient temperature with continuous agitation to minimise the risk of oil separation. If thermal processing is not feasible, the use of pasteurised macadamias is recommended, along with the strict implementation of Good Manufacturing Practices (GMP) throughout production.

• The inclusion of emulsifiers is necessary to maintain physical stability and reduce oil separation through the shelf life. Glycerides (E 471) or sunflower lecithin (E 322) are recommended to use in this application.

# Manufacturing considerations when combining macadamia praline with chocolate

Tempering chocolate is essential for achieving a smooth, glossy finish and a firm snap when broken. This process involves three key stages - heating, cooling and reheating - to promote the formation of stable crystals. The recommended temperature ranges for each stage vary depending on the type of chocolate, as outlined below.

Temperature	Dark chocolate	Milk chocolate	White chocolate
Stage 1	45°C	45°C	40°C
Stage 2	27°C	26°C	25°C
Stage 3	32°C	29-30°C	28-29°C

 When chocolate is properly tempered within the recommended temperature range, it develops a glossy, smooth finish. If not tempered correctly, it may appear dull or mottled due to poor crystal formation. In cases where tempering is not feasible, applying a thin layer of edible glaze, such as shellac, can enhance the chocolate's shine.

## Alternative flavour suggestions

- Biscoff® inspired milk chocolate and macadamia praline
- Strawberry and white chocolate with macadamia praline
- Dubai chocolate with macadamia praline
- Caramel, sea salt and dark chocolate with macadamia praline
- Matcha chocolate with macadamia praline
- Milk chocolate and cappuccino with macadamia praline
- Dark chocolate and rum with macadamia praline
- Mango and white chocolate with macadamia praline

## Regulatory compliance check

All ingredients are permissible in Australia at the recommended levels. For specific international markets, please refer to the relevant regulatory standards in your country to ensure compliance and make any necessary adjustments to the additives used.



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