



GLOBAL PRODUCT CONCEPT - PLANT-BASED FROZEN DESSERT

# Sesame Chickpea Frozen Dessert

### **BACKGROUND**

The market for plant-based frozen desserts / vegan ice cream is growing rapidly. But, as consumers expect the same properties as from a conventional ice cream in terms of creaminess, heat shock stability and melting resistance, manufacturers are in for a challenge. With a good emulsifier/stabiliser system and advice from Palsgaard on process and protein sources you'll be off to a good start.

### **CHALLENGES IN PRODUCT DEVELOPMENT**

- High viscosity
- Poor overrun
- Poor mouthfeel
- Poor meltdown and heat shock performance
- Serum separation in plant-based frozen dessert mix

### **PALSGAARD TECHNOLOGY**

Palsgaard® Extrulce 379

Integrated mixture of emulsifier and stabilisers

Ingredient declaration:

- Mono- and diglycerides of fatty acids E 471
- Guar Gum E412
- Cellulose gum E466
- Carrageenan E407 (standardized with sucrose)
- Anti-oxidant

### **PRODUCT ADVANTAGES**

- Cold dispersible
- Facilitates the incorporation of air into mix giving a high and stable overrun
- Prevent formation of ice crystals hence giving a creamy and uniform texture
- Provides dryness on extrusion and excellent stand up and meltdown properties
- Protects the ice cream / plant-based frozen dessert against heat shock damage when exposed to fluctuating temperatures during distribution and storage
- Attractive cost-in use
- Kosher / Halal certified
- Produced in CO<sub>2</sub>-neutral factories



PALSGAARD® EXTRUICE 379

# Sesame Chickpea Frozen Dessert – Recipe Suggestion



# Recipe

	Percentage
Palsgaard® Extrulce 379	0.50
Sugar	8.00
Glucose syrup, 42DE	10.00
Hydrogenated Coconut Oil <sup>1</sup>	10.00
Chickpea powder- ChickP S930 <sup>2</sup>	1.00
White Sesame Paste (60% fat, 23.3 % protein) <sup>3</sup>	5.00
Water up to	100.00%

# Add colour and flavour as desired

<sup>1</sup> Oleo Fat	ts
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<sup>&</sup>lt;sup>2</sup> Growthwell

Composition
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	Percentage
Fat	13.01
Protein	2.00
Palsgaard® Extruice 379	0.50
Total Solids	31.32

<sup>&</sup>lt;sup>3</sup> Kuki, Japan

<sup>&</sup>lt;sup>4</sup> Beneo



## Procedure

- Hydrate chickpea powder at 70°C for approximately 20 minutes, under constant stirring
- Pre-blend Palsgaard® Extrucce 379 with sugar and add into the frozen dessert mix while
- Add pre-melted vegetable fat and the rest of the ingredients to the solution, mix well
- Pre-heat to 65-75°C
- Homogenize at 140 bars
- Pasteurise at 80°C for 30 seconds
- Cool to below 5°C and age for minimum of 4 hours
- Freezing





# **ORDER SAMPLES**

To order samples of Palsgaard® Extrulce 379, please contact your local Palsgaard office via Palsgaard.com