



GLOBAL PRODUCT CONCEPT – PLANT-BASED FROZEN DESSERT

# Faba Bean Oat Frozen Dessert

Prepared by Palsgaard's Global Industry Team Ice Cream – by Marilyn Tan



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## Faba Bean Oat 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

# Fava Bean Oat Frozen Dessert – Recipe Suggestion



## Recipe

	Percentage
Palsgaard® Extrulce 379	0.50
Liquid Oat Base <sup>1</sup>	20.00
Sugar	12.00
Glucose Syrup	10.00
Hydrogenated Coconut Oil <sup>2</sup>	10.00
Fava bean Isolate FB65 <sup>3</sup>	1.00
Salt	0.10
Water up to	100.0%

<sup>1</sup> From Pure Harvest

<sup>2</sup> From Oleo Fats

<sup>3</sup> From Herba

## Composition

	Percentage
Fat	10.32
Protein	1.01

Palsgaard® Extrulce 379	0.50
Total Solids	32.52

## Procedure

- Hydrate fava bean isolate at 70°C for approximately 20 minutes, under constant shearing
- Add oat milk to hydrated protein solution and heat up to 45°C
- Pre-blend **Palsgaard® Extrulce 379** with sugar and add into the frozen dessert mix while stirring.
- Add the rest of the ingredients to the solution; mix well.
- Add melted fat while stirring.
- Pre-heat to 65°C - 75°C.
- Homogenize at 140 bars (single stage).
- Pasteurize at 80°C for 30 seconds.
- Cool to below 4°C and age for minimum of 4 hours.
- Freeze using ice cream churner.



## ORDER SAMPLES

To order samples of Palsgaard® Extrulce 379, please contact your local Palsgaard office via [Palsgaard.com](http://Palsgaard.com)