



Palsgaard®

GLOBAL PRODUCT CONCEPT – PLANT-BASED FROZEN DESSERT

Almond Oat Frozen Dessert with Inulin

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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 CO₂-neutral factories

PALSGAARD® EXTRULCE 379

Almond Oat Frozen Dessert with Inulin – Recipe Suggestion



Recipe

	Percentage
Palsgaard® Extrulce 379	0.50
Sugar	8.00
Glucose syrup, 42DE	10.00
Hydrogenated Coconut Oil ¹	10.00
Oat Powder- BevOat Low Viscosity ²	1.00
Pure Almond Paste (52% fat, 21% protein) ³	5.00
Orafti HSI ⁴	2.00
Water up to	100.00%

Add colour and flavour as desired

¹ *Oleo Fats*

² *Glanbia*

³ *Bakery Laboratory Pte Ltd*

⁴ *Beneo*

Composition

	Percentage
Fat	12.67
Protein	1.17
Palsgaard® Extrulce 379	0.50
Total Solids	28.32

Procedure

- Hydrate oat powder at 70°C for approximately 20 minutes, under constant stirring
- Pre-blend Palsgaard® Extrulce 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 70-75°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

Photo of dummy packaging to be inserted – ask assistance for this from mds@palsgaard.dk



ORDER SAMPLES

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