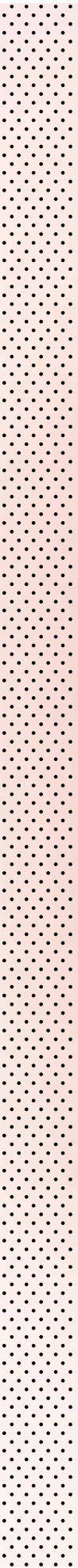


Ice cream emulsifiers & stabilisers

For heat-shock control
and creaminess in ice cream



Palsgaard®



Let us help you satisfy consumer desires

Consumers are becoming increasingly aware of the ingredients that go into their food and how they are produced, placing new demands on food producers and the ingredient manufacturers that serve them. This is also true for ice cream, the most loved dairy dessert in the world. Not only must the ice cream have the right creaminess, flavour release, mouthfeel and melt-down properties, it must also be produced using sustainable ingredients.

Your global, sustainable partner in ice cream innovation

Palsgaard can help you check all the boxes: We offer a wide range of sustainably and CO₂-neutrally produced emulsifiers and stabiliser blends, custom-designed to achieve the sensory properties your customers demand. And, we gladly share our know-how, helping you to test and develop new recipes in our global application centres in Denmark, Russia, Mexico, Singapore and China.

Ice cream's worst enemy

There's nothing worse than losing control over the quality of your ice cream – particularly after it leaves your factory in perfect condition. Poor quality is, however, a reality for manufacturers whose products are subjected to “heat-shock” caused by temperature fluctuations along the journey from factory to consumer.

Heat-shocked ice cream, at its worst, becomes a crunchy, gritty, watery disappointment instead of a smooth, full-tasting indulgence. That's because, with each rise and fall in temperature, a little water

is released, migrating to nearby small crystals and increasing their size until they become unavoidably (and unenjoyably) noticeable to the consumer. That's bad business for you and for the environment, leading to poor brand perception and risking food waste.

Beat the heat-shock effect

With the right blend of emulsifiers, stabilisers and know-how, however, quality ice cream can be helped to stay that way – and at Palsgaard we gladly share our expertise, helping you create heat-shock-ready recipes for your ice creams.



Products for today – and tomorrow

A broad range of solutions

Emulsifiers and stabilisers make up only a small part of the final product, but they have a significant impact on quality, such as sensory characteristics and melting resistance, and, of course, heat-shock and storage stability.

Determining the right combination is, therefore, extremely important to obtain desired characteristics. And our technical teams like nothing more than helping you to find the right solution for your products! With more than 60 years of experience working with the ice cream industry, we know exactly how to get the final result you're looking for, no matter if you are producing:

- Extruded ice creams
- Moulded ice creams
- Soft-serve ice cream
- Ice lollies
- Sherbets and sorbets
- Frozen mousse

Palsgaard offers you a broad range of solutions customised for each specific type of product.

Integrated emulsifiers and stabilisers

Palsgaard offers ready-mixed emulsifiers and stabilisers as unique, integrated products. The suspension of stabilisers in the melted emulsifiers, followed by an advanced spray crystallisation process, transforms the product into a uniform, free-flowing powder. Compared with plain dry blends, the key advantages of Palsgaard's integrated products are:

- Correct proportional dosage of emulsifiers and stabilisers
- No risk of deblending in the bags
- Free-flowing, uniform powder
- Dust-free handling
- Dispersibility at low temperatures
- No pre-mixing with other dry ingredients required before addition to the ice cream mix

Want to go TFA and palm-free?

To help ice cream manufacturers meet the demand for palm-free, yet still delicious ice creams without trans-fatty acids, Palsgaard has developed a series of integrated TFA and palm-free emulsifier and stabiliser blends that will help you do just that.



Extruded ice creams

The use of extrusion technology for making ice cream products such as “funny face” ice creams, cones with decorated tops or multi-layered desserts requires emulsifier/stabiliser systems designed to improve the stand-up and melt-down properties of the ice cream. We are experts in this field.

Our **Palsgaard® Extrulce** and **Palsgaard® IceTriple** series include a wide range of highly functional emulsifier and stabiliser systems, all ensuring a very slow melt-down of the ice cream. The range includes products designed for standard or premium ice cream, lean label ice cream, and diabetic or soft ice cream, too.



Moulded ice creams

A softer ice cream texture is desired for producing moulded ice cream, enabling the ice cream to flow smoothly into the mould or final packaging. This will be ensured by the right combination of emulsifiers and stabilisers, while still ensuring a creamy, slow-melting ice cream with good storage stability.

Our **Palsgaard® MouldIce** series offer just that, whether you're producing family packs, stick ice cream, cups and cones or soft scoop ice cream.



Keeping flavour and colour uniform



Ice lollies

In ice lollies, the main functions of emulsifiers and stabilisers are to control the formation and stability of ice crystals and to keep flavour and colour uniform during consumption.

Our **Palsgaard® WaterIce** series, custom-designed for ice lollies, offers numerous benefits, including freshness, improved mouthfeel, controlled flavour/colour release, high stability – even at a very low pH – and control of ice crystal growth.

Sorbets and sherbets

Would you like to make your sorbet or sherbet products even more appealing? Our **Palsgaard® FruitIce** series, made up of carefully selected blends of stabilisers and emulsifiers, can do a lot to refine mouthfeel, texture and body, and melt-down properties. Achieve, for example, a more refreshing, creamier, or more crystalline texture to delight consumer palates. Choosing the right **Palsgaard® FruitIce** opens up a world of possibilities, enabling texture and mouthfeel to be tailored to match consumer preferences.

Extruded water ice

By incorporating air into the product, the water ice becomes smoother and creamier, and by applying the right **Palsgaard® FruitIce**, you'll be able to improve foam stability and melt-down properties as well as texture and body.



A man in a white lab coat and hairnet is working in a kitchen. He is pouring liquid from a metal cup into another metal cup. The background shows a kitchen with various equipment and a sink. The man's lab coat has the Palsgaard logo and his name, "Gert H. Sørensen", on it.

Innovation starts with experts


Take advantage of our unique insights into consumer trends and specific local requirements, and choose Palsgaard for your next innovative project. Our experienced food technologists are experts at solving challenges within recipe requirements, sensory requirements, emulsion stability, processing conditions or ingredient availability – and they are happy to share their know-how. With application centres in Denmark, Mexico, Singapore, China and Turkey, help is never far away.

Choose ingredients that do good

Palsgaard is committed to acting responsibly for the good of our planet, consumers, the local communities we are a part of, and our employees. Consumers are also increasingly conscious of environmental challenges and other CSR-related topics, and all products in the **Palsgaard® Extrulce, IceTriple, MouldIce, WaterIce and FruitIce** series live up to our high standards for sustainability.

- Produced in CO₂-neutral factories
- Sourced sustainably from RSPO SG-certified palm or non-palm sources
- Produced with minimum waste, and minimum consumption of energy and water
- Handled by a responsible supply chain that lives up to all international standards

To learn more about our efforts within CSR, please visit www.palsgaard.com/CSR



Bringing good things together for over a century

The modern food emulsifier was invented by the founder of Palsgaard, Einar Viggo Schou, in 1917. Since then, we have never stopped developing and improving our products, and it is part of our DNA to keep developing yours. Bringing together your unique challenges and our drive for perfection is the recipe for a successful collaboration, and for great products that consumers love.

We also bring together the know-how of a century with a deep sense of responsibility for future generations. That's why all our production sites are CO₂-neutral and why we go to great lengths to live up to the relevant UN Sustainable Development Goals.

Learn more about our heritage and values at

palsgaard.com

Palsgaard[®]
♥ Heart working people