### Dairy emulsifiers & stabilisers

For creaminess and stability in dairy products





# Let's 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 dairy-based products. Not only must they have the right creaminess, texture, mouthfeel, stability, viscosity and shelf-life, they must also be produced using sustainable ingredients.

#### Global challenges met at local levels

As a global emulsifier/stabiliser manufacturer, Palsgaard has unique insights into local requirements and trends. Our global involvement is a constant source of fresh inspiration, enabling us to help customers introduce new dairy products inspired by consumer favourites from other parts of the world.

#### Fast-track - from idea to market

Emulsifiers and stabilisers only make up a mall part of the final product, but they have a significant impact on quality. Determining the right combination is, therefore, extremely important in order to obtain desired characteristics. And our technical teams like nothing more than helping you to find that exact combination! With more than 60 years of experience working with the dairy industry, we know exactly how to get the final result you're looking for, whether you are producing milk drinks, acidified products, whipping creams, aerated desserts or creamers and whiteners.

#### **Application areas**

- Milk drinks
- Acidified products
- Whipping creams
- Aerated desserts
- Creamers & whiteners

## The perfect emulsion and creaminess for UHT milk and milk drinks



#### Designed for long shelf-life

Achieving high-quality, milk-based drinks designed for long shelf-life, such as recombined milk, flavoured milk, fortified milk or condensed milk products, often presents problems of fat separation and sedimentation. Producers need to be able to address these issues without losing focus on the desired sensory preferences.

**Palsgaard® RecMilk** is our series of well-tested and well-documented emulsifier and stabiliser solutions, custom-designed for:

- Recombined and flavoured milk drinks
- Fortified milk drinks
- Evaporated and condensed products

#### Palsgaard® RecMilk benefits

By adding the right choice of **Palsgaard® RecMilk** to your products you will be able to:

- Have a simplified dispersion process during hydration and recombination
- Increase the heat stability of the milk proteins, thus reducing the risk of fouling during UHT treatment
- Facilitate the formation of a stable emulsion
- Maintain a good creaminess and mouthfeel
- Reduce foaming during processing
- Maintain a stable product throughout its shelf-life



#### Keep the cocoa particles in suspension

Chocolate milk produced from fresh or recombined milk requires special ingredients to keep the cocoa particles in suspension. The right combination of emulsifiers and stabilisers is key, selected according to the type and level of milk-solids and the process applied.

Through our **Palsgaard® ChoMilk** series, Palsgaard offers premium-quality blends of emulsifiers and stabilisers developed to match the high quality standards that manufacturers of chocolate milk require.

#### Reduced energy consumption

One member of the **Palsgaard® ChoMilk** family is particularly well-suited for production lines with higher filling temperatures of around 30°C.

Equally, it will allow products to be stored at ambient temperatures even in warmer climates. This opens up for energy and cost savings as no cooling is needed during production and storage.

#### Palsgaard® ChoMilk benefits

By choosing the right **Palsgaard® ChoMilk** you will be able to create products with:

- Emulsion stability throughout the entire shelf-life
- Suspension of cocoa particles during storage and transportation
- Desired mouthfeel and viscosity





Acidified and fermented products are a major part of the daily diet in many parts of the world. At Palsgaard, we focus on the challenges dairy producers face within development, production and distribution – and more importantly: How to overcome these challenges in the best possible way.

Mouthfeel, texture and stability are crucial when it comes to dairy products. It makes a world of difference when a set yoghurt is stable and creamy – or when the texture of a stirred yoghurt is precisely the way consumers expect it to. And it must be the same experience every time.

With our **Palsgaard® AcidMilk** series we offer a range of emulsifier/stabiliser blends custom-designed for use in a variety of products, including:

- Set yoghurt
- Stirred yoghurt
- Drinking yoghurt and yoghurt drinks
- Sour cream
- Other acidified products

#### Palsgaard® AcidMilk benefits

**Palsgaard® AcidMilk** will help you improve:

- Firmness
- Viscosity
- Creaminess
- Mouthfeel
- Syneresis
- Protein stability



# Let's help you choose the right system

#### Stirred and set yoghurt demands

If you're manufacturing set or stirred yoghurts or labneh, you'll know they differ in creaminess, firmness and viscosity. And these differences place varying demands on the emulsifier and stabiliser system needed. Choosing the right **Palsgaard® AcidMilk** system ensures you can achieve a smooth surface, a creamy texture and good stability – at exactly the levels your customers demand.

#### Keeping yoghurt drinks stable

Yoghurt drinks are produced in different ways, demanding different functional properties from the stabiliser. For yoghurt drinks with different levels of milk solids, **Palsgaard® AcidMilk** helps obtain the right viscosity, mouthfeel, texture and storage stability. Furthermore, Palsgaard's emulsifier and stabiliser systems are developed to work under different processes, such as yoghurt drinks with live bacteria and long-life yoghurt drinks.

#### Sour cream stability

In sour cream, **Palsgaard® AcidMilk** ensures a homogeneous texture and mouthfeel during the whole shelf-life and use, including excellent cooking stability.





# The secret behind successful imitation whipping creams

#### The perfect balance

Stability versus whipping properties represents a key compromise for manufacturers of UHT whipping creams. Years of dedicated work and development in the production of emulsifier / stabiliser solutions for UHT whipping creams has led to Palsgaard becoming one of the preferred suppliers for this application area. Whether you are searching for solutions for the production of UHT whipping creams based on vegetable or dairy fat, with a soft or a more firm foam, or if the goal is to make a vegan UHT whipping cream entirely without proteins, then **Palsgaard® CreamWhip** is the solution.

#### Palsgaard® CremWhip benefits

**Palsgaard® CreamWhip** can help you achieve the desired:

- Overrun
- Foam stability
- Mouthfeel
- Piping definition



### Improving aerated desserts

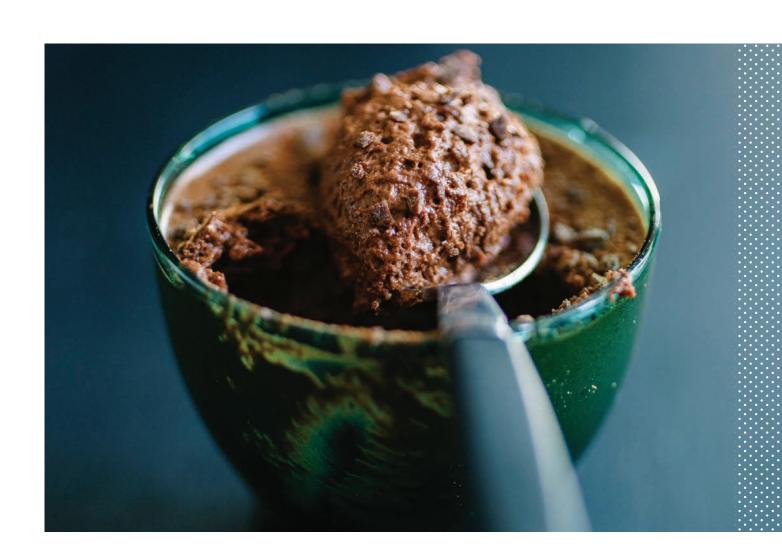
#### Stable foam throughout the required shelf-life

Aerated desserts produced with an aerator require special attention to create a foam that will remain stable throughout the required shelf-life. Our team of experts can recommend the perfect combination of emulsifiers and stabilisers, optimised for each recipe's fat level, protein source, pH, overrun and desired mouthfeel. Most aerated desserts are chilled during transport. To withstand this storage, and to retain the right mouthfeel and other quality signals demanded by consumers, the foam needs to be supported by a rigid structure.

#### Palsgaard® Dessert benefits

Using **Palsgaard® Dessert** series you can improve the:

- Foam stability
- Foam structure
- Mouthfeel





PALSGAARD® CREAMER

## Fast and easy dispersion

#### In both powder and liquid form

Coffee creamers and tea whiteners are produced in both powder and liquid form, and may contain dairy ingredients or be entirely vegetable-based. Either way, they need to disperse easily and freely in hot coffee or tea to obtain the maximum whitening effect. And they have to withstand the acidic environment of the liquid without feathering, too.

#### Palsgaard® Creamer benefits

- Easy dispersion
- Improved whitening effect
- Prevention of oiling-out in the hot drink
- Improved mouthfeel





### 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 CO<sub>2</sub>-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** 

