

How can you increase  
quality, reduce costs  
and sharpen your  
ESG edge?

# Key Industry Insights

The confectionery industry today faces several challenges, from maintaining the highest product quality to optimizing production costs and meeting sustainability goals. Addressing these challenges requires innovative solutions that enhance efficiency while ensuring product excellence.

## 1. Quality

Ensuring the highest product standards

## 2. Cost optimisation

Reducing production costs without compromising quality

## 3. Environmental, Social, and Governance (ESG)

Supporting sustainable production through innovative solutions

### **High-functionality emulsifiers = huge cost savings & efficiency**

Palsgaard's high-functionality PGPR and AMP emulsifiers, developed exclusively for chocolate production, are designed to improve the flow properties of chocolate.

High functionality means achieving optimal results with lower dosages, which can lead to substantial cost savings.

For example, compared with conventional emulsifiers, Palsgaard AMP 4455 allows manufacturers to reduce the use of expensive cocoa butter by 2-4% while maintaining coating quality.

In practice, this means that up to 400 tons of cocoa butter can be saved for every 10,000 MT of chocolate produced.

### **Enhancing efficiency, reducing waste**

High-functionality emulsifiers such as Palsgaard PGPR and AMP play a crucial role in improving production efficiency, reducing waste, and ensuring responsible resource use.

By optimising flow properties, these emulsifiers help manufacturers cut waste, increase energy efficiency, and make the most of every ingredient.

### **Key ESG focus areas:**

- Wastage reduction (especially food waste)
- Responsible consumption and efficiency
- Maximising resources to drive sustainable production

# Addressing rising cocoa butter costs

One of the biggest challenges facing chocolate producers is the rising cost and scarcity of cocoa butter.

By using Palsgaard AMP 4455, producers can lower their reliance on cocoa butter without sacrificing product quality, contributing directly to cost savings and more efficient production processes.

## Technical support & continuous improvement

### Rheology expertise

Palsgaard's technical support team uses advanced rheometry analysis tools to measure and optimise chocolate flow properties, the benefits of which include preventing waste and enhancing production line efficiency.

### Waste reduction

Technical solutions like this allow for quality control, reduction in waste, and improved capacity without manual intervention, leading to a more streamlined and cost-effective production process.

### Microbial safety: protecting your brand

All Palsgaard emulsifiers are produced in closed, hygienic systems, ensuring no risk of microbial contamination. This stringent safety standard protects brands from the significant financial and reputational risks that come with product recalls and factory shutdowns.

### Collaborating for success

Palsgaard's application specialist teams, led by Seyma in Türkiye and Kasper in Denmark, are always ready to collaborate on recipe optimisation, or to solve technical chocolate production challenges, like avoiding air bubbles or feet formation.

Whether it's cocoa butter savings or quality consistency, Palsgaard can work with you to drive measurable improvements in your production process.



# Emulsifiers. It's our whole world.

At Palsgaard, our world is plant-based food emulsifiers and has been for over 100 years. And just like emulsifiers, we're proud to say that we play a small but crucial role in delivering delicious foods to a growing population. We also offer our responsibly produced, custom-tailored solutions to non-food markets such as polymers and personal care.

## A century of emulsifier expertise

Ever since our founder Einar Viggo Schou invented the plant-based food emulsifier back in 1917, an agile and entrepreneurial spirit has powered everything we do. Our food technology experts across seven global application centres are dedicated to using our understanding of emulsifiers to drive constant innovation and empower the international food industry to explore new trends.

Emulsifiers enable the mixing of otherwise incompatible ingredients, such as water, oil, and air. While they make up only a fraction of the finished product, they have a huge impact on its quality, allowing makers of bakery, confectionery, condiments, dairy, ice-cream, margarine, and plant-based food products to produce stable emulsions, prevent oil separation, and control aeration and viscosity.

In turn, this enables the production of endless tasty food products, such as soft, moist cakes, perfectly moulded and enrobed chocolates, and delightful whipping creams. When combined with stabilisers, emulsifiers help ice cream, dairy, and plant-based product manufacturers improve the stability, mouthfeel, creaminess, and texture of their creations. Finally, emulsifiers

and stabilisers also make it possible to produce delicious foods with a longer shelf-life while using fewer resources, just as they support food products with leaner labels, less fats, salt, and sugar and free from allergens.

## Committed to responsibility

In 1908, long before Environmental, Social and Governance (ESG) was ever a thing, our founder established an enduring culture of responsibility, loyalty, and respect at Palsgaard. This meant caring for and celebrating our heart-working colleagues, their families, and our local communities. It's a commitment that continues to fuel our drive to make Palsgaard a great place to work.

Being niche experts doesn't mean we lack ambitions. From responsible sourcing to reducing our energy consumption and CO<sub>2</sub> emissions, we aspire to be better every single day. And we're actively involved in initiatives tackling societal challenges like food waste, food safety, and food scarcity. We've been a member of the RSPO since 2008, and our full range of food emulsifiers is available with RSPO SG certification.