# Silica Products



## Customer Case Study

Global food ingredients manufacturer achieves optimal product qualities, production efficiencies with PPG silica as a carrier for dry liquid concentrate (DLC)



# Status quo no longer



# Challenge

For a European-based global food ingredient manufacturer, exceptional product performance and consistency, and a committed supplier partnership, were crucial in the production of lecithin as a dry liquid concentrate (DLC) using silica as a carrier.

As a critical raw material, reliable and high-quality silica was essential for the manufacturer.

After encountering production complications and silica performance issues, the manufacturer's incumbent silica supplier failed to provide a product that consistently held the required 70% loading capacity of active ingredients. The manufacturer needed more than a silica provider – they needed a solutions partner.



Serving as an absorbent carrier, PPG silica enables lecithin to be used as an emulsifier for flavoring extracts, dry baking mixes, powdered beverages and more.

#### Summary

For a global producer of food ingredients, PPG helped propel success in the production of lecithin as a DLC, using PPG FLO-GARD<sup>™</sup> 255C-D silica as a carrier.

- Ideal loading level
- Free-flowing, anti-caking powder-like substance
- Reliable and consistent in the manufacturing process
- Improved product quality, throughput and efficiency
- Solutions-focused approach to technical support
- Committed supplier
  partnership



# Solution

When the manufacturer's strategic supply partner, a long-time PPG distributor, recognized these issues, they suggested PPG help solve the problem. PPG's sales and technical support teams conducted testing and research to pair their silica product offerings precisely with the manufacturer's needs. Following robust analyzation, PPG FLO-GARD<sup>™</sup> 255C-D silica met the liquid loading target, price point and other desired qualities.

Moving to real-world production conditions, the manufacturer ran the PPG silica through their production process with PPG's technical support team on-site for guidance. During this time, PPG was also able to help the manufacturer improve throughput and streamline its packaging process.

As an added benefit, *PPG Flo-Gard* 255C-D silica is supplied regionally from PPG's Delfzijl, Netherlands production facility for sustainable sourcing purposes.



## **Results**

The manufacturer adopted the use of *PPG Flo-Gard* 255C-D silica, a product backed by more than 30 years of research and development. The final product resulted in a free-flowing, anti-caking powder-like substance which met the goal of absorbing 70% of liquid into particle surfaces.

*PPG Flo-Gard* 255C-D silica helped the manufacturer improve manufacturing throughput due to shorter mixing and faster packing times, allowing greater storage and transportation flexibility.





From robust laboratory testing and onsite production support, PPG served not just as silica product supplier, but a solutions partner.

# Why it Works

Requiring a silica capable of 70% loading capacity for use in its lecithin production, a global food manufacturer partnered with PPG. After thorough lab and manufacturing site testing, PPG supported the manufacturer in transitioning from the incumbent supplier's silica to PPG Flo-Gard 255C-D silica. The manufacturer selected PPG due to product quality and consistency paired with leading technical support. The transition from the incumbent to PPG ultimately increased the customer's product quality and production throughput.

To learn more about PPG's line of versatile, high-performance precipitated silica products for the food industry, visit **ppgsilica.com**.

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