



HempWell Case Study

How HempWell Solved Persistent Balm Frosting and Stability Issues

The challenge

HempWell had developed a CBD muscle balm that was well aligned with its wellness positioning, but recurring quality issues were undermining confidence in the product. Batches were developing visible frosting on the surface, a grainy texture was emerging during storage, and product appearance was becoming increasingly inconsistent over time. Alongside these technical challenges, the team had concerns about the high concentration of essential oils within the formulation and whether the product would remain commercially and regulatorily sustainable as the brand continued to grow. The key question was simple but difficult to answer: were these defects being caused by manufacturing variability, or was the problem embedded within the formulation itself.

Our Approach

Olalla Consulting was engaged to conduct a full formulation troubleshooting assessment. Rather than focusing solely on the visible defects, the investigation examined the entire product architecture, including ingredient interactions, crystallisation behaviour, essential oil loading, processing conditions and long-term stability mechanisms. The analysis revealed that the frosting and graininess were symptoms of a deeper structural issue. The combination of soy wax, cocoa butter and an unusually high essential oil load was creating a system that was naturally prone to crystal growth, bloom and physical instability over time. Manufacturing conditions could accelerate the problem, but they were not its primary cause. By identifying the true scientific drivers of failure, the project shifted from troubleshooting symptoms to redesigning the formulation strategy.

Outcome

The outcome was a clear technical roadmap that gave HempWell confidence in how to move forward. The project established the root causes of frosting, crystal bloom and texture instability, while also highlighting the regulatory and toxicological risks associated with the existing essential oil levels. Instead of a single recommendation, HempWell received a tiered development strategy ranging from optimisation of the current formulation through to a performance-led redesign better suited to its CBD wellness positioning. The work transformed an ongoing product quality issue into a structured innovation programme, providing a more stable platform for future development, reducing technical risk and creating a stronger foundation for long-term product performance and customer satisfaction.

Client testimonial

Olalla Consulting provided us with a level of technical insight that helped us understand issues we had been trying to solve internally for some time. The work went far beyond troubleshooting and gave us a clear development pathway for improving our muscle balm while maintaining our CBD wellness positioning."

Clare Nunez, HempWell Ltd