



Synergistic approaches in Zeta Potential, Particle size and Stability Analysis for advanced research

Case study on a cosmetic formulation

Context

Formulators encounter various challenges daily, such as the impact of switching suppliers on product quality, the risk of formula destabilization when substituting a component, or the need to incorporate a new ingredient. To meet customers' and formulators' expectations for the final product, it is crucial to employ cutting-edge technologies that comprehensively characterize systems. MICROTRAC provides a wide range of technologies and tools for characterization, supporting formulators in the product development process for fast decision-making based on facts. This note presents a case study that combines zeta potential, particle size, and shelf-life stability to optimize a sunscreen formulation.

Three instruments, ONE conclusion

MICROTRAC provides technologies with unique features:

STABINO ZETA

For automated fast zeta potential measurements at high concentration.

NANOTRAC FLEX

For particle size distribution **without dilution**.

TURBISCAN

For **1000x faster** final formulation destabilization detection and quantification without dilution

By combining all these technologies, the time needed to introduce products to the market is reduced and the optimal formula is identified quickly, with the highest level of accuracy.