Technology search

Film-forming polymeric ingredients for alcohol-based sunscreen sprays

Client overview

An established personal care company wanted to replace the non-biodegradable, film-forming ingredients in their sunscreen products. Consumers and regulatory bodies are concerned about the environmental impact of sunscreens on ecosystems.



Many sunscreen formulations currently use acrylate polymers that are not biodegradable. The client wanted film-forming ingredients that provide a boost to the sunscreen's SPF value. Of key interest were polymeric ingredients that were biodegradable, preferably bio-sourced that could be formulated into an ethanol-based sunscreen spray. The client asked Strategic Allies (SAL) to identify solutions that the client could test inhouse for ethanol solubility and effect on SPF value.



The search

SAL searched globally for polymeric, film-forming ingredients from personal care ingredient suppliers and chemical suppliers. SAL engaged their partner network to identify innovative start-ups developing suitable ingredients and found further companies by desk-based research. As the client was familiar with many of the ingredient companies that supply the personal care

industry, SAL worked closely with the client to highlight novel and established ingredients they might not have considered or were not familiar with. Technology holders and developers were interviewed, and their solutions were evaluated against the client's criteria: film-forming activity, polymeric structure, biodegradability, bio-sourced, ethanol solubility and effect on SPF values. SAL presented the most suitable ingredients to the client but also highlighted companies developing novel ingredients that may not have matched the spec fully, but that were innovative in approach. At the end of three months of searching the client was very happy with the results and asked to continue the search for an additional three months.

"...the iterative process and regular meetings, allowed us to discuss questions as they came up and clarify our interest.....we would highly recommend this approach"

"...a really successful search"

Outcome

33 companies were shortlisted and presented to the client – SAL provided an overview of each company, information on their film-forming ingredients, and an assessment of how closely they matched the client's specification.

The client prioritised **6 companies** for direct contact to find out more about their range of ingredients and to arrange for samples to be sent.

