

Challenge Accepted.

GAINING TRACTION WITH WET GRIP SOLUTION



» CASE STUDY: GLS™ THERMOPLASTIC ELASTOMERS





WET GRIP TECHNOLOGY PROVIDES POWERFUL SOLUTION FOR SURFCO HAWAII

THE CHALLENGE

For decades, the team at SurfCo Hawaii, Inc. has maintained an international reputation as a leader and innovator of unique surfing products. With such a reputation, the pressure was on to bring Owner/Inventor David Skedleski's idea for a non-abrasive grip tape for the deck of surfboards to life.

The concept was born out of a desire to replace traditional wax, which is messy and rubs off over time. The challenge was to develop a solution that would maintain grip when wet, be non-abrasive to the skin, stand up to UV, allow good adherence to and visibility of the board— all the while, staying true to SurfCo's roots in both safety and performance.

THE SOLUTION

Working collaboratively with SurfCo and its manufacturer and processor, Avient set to work on developing a polymeric, wet grip technology. Building on the design concept from SurfCo, Avient conducted additional R&D work to formulate a specialty thermoplastic elastomer (TPE) that could be coextruded with polypropylene (PP) film and meet the high expectations of SurfCo and surfers everywhere.

The customized TPE offered excellent hydrophobic qualities and similar melt strength to PP while still maintaining its key mechanical properties. Furthermore, Avient's technical team helped achieve a surface finish that would allow for a strong bond with an adhesive backing and recommended suitable adhesives to achieve optimal bonding of the materials. Successful coextrusion also allowed the manufacturer to incorporate texture into the final product, further enhancing the traction.

Ready for testing, the new material was subjected to rigorous environmental testing, including months of sun exposure and long-term placement in humidity-rich environments. In response to the tests, Avient leveraged

its expansive portfolio of specialty additives to tailor the TPE for enhanced UV resistance and to inhibit mold growth—leading to an end product that would perform better for longer.

Ultimately, Avient customized a GLS™ wet grip TPE that outmaneuvered traditional materials—delivering dynamic hydrophobic performance, translucent aesthetics, non-abrasive comfort grip, and excellent UV protection.

THE IMPACT

The launch of the Wax Mat®¹ grip tape introduced a fresh alternative to wax for wet grip to surfboard decks, helping to further differentiate SurfCo. Beyond grip, the non-abrasive material doesn't peel up thanks to a durable bond with the adhesive backing, giving customers a reliable solution that eliminates the problem of a slippery surface.

Adding to that success, the material's ability to retain traction when wet opened doors for SurfCo to expand into new markets and applications. Charging ahead, the company has continued to leverage Avient's technology and technical expertise to pursue the commercialization of additional anti-skid products for marine and military vessels, and non-slip products for the pool, bath, and walkway markets.

To learn more about our wet grip TPEs, contact Avient at +1.844.4AVIENT (1.844.428.4368) or visit avient.com.