

Challenge Accepted.



**ECO-CONSCIOUS
FLEXIBLE FOAM
GUN GRIP
SLEEVES
HIT THE MARK**



» **CASE STUDY: CORE™ NON-PHTHALATE PLASTISOLS**





ECO-CONSCIOUS PLASTISOLS IMPROVE THE FIREARM EXPERIENCE AND MEET GUIDELINES

THE CHALLENGE

EZR Sport® is an American company specializing in grips for industrial & military manufacturers since 1964. In creating the EZR Gauntlet® System, the company aims to provide custom-fit gun grip sleeves that improve performance and confidence when handling a firearm.

Gun grips can often be rigid, uncomfortable, or unsteady in a shooter's hand for various reasons like rainy weather causing wet hands or warm weather causing sweaty hands. Aftermarket gun grips made with materials such as silicone, rubber, or tape can typically leave residue on a shooter's hand. These materials can also deteriorate with ultraviolet (UV) and chemical exposure from sunlight and cleaning.

EZR Sport wanted a flexible foam grip that could be chemically resistant to gun oil and diethyltoluamide or DEET (the most common active chemical ingredient in insect repellents), UV resistant for longer-lasting aesthetics, and compliant with California's Proposition 65 law (requiring businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, congenital disabilities or other reproductive harm).

To help solve these material challenges, EZR Sport reached out to Avient's Specialty Coatings group for solutions that could meet their requirements while providing improved grip, enhanced control, and added comfort to the shooting experience.

THE SOLUTION

Avient worked with EZR Sport to develop a solution and CORE™ Non-Phthalate Plastisols were chosen as a potential fit. CORE plastisols offer strength and flexibility while being phthalate-free, providing an alternative for markets and applications affected by strict guidelines. This technology also helps achieve superior grip properties, improving haptics for a better sense of touch and feel while remaining UV-resistant, chemical resistant to DEET and oils, and bio-compatible. These versatile formulations are suitable for multiple plastisol processing methods and can be custom formulated to meet specific customer requirements.

As an award-winning group of highly experienced formulators, engineers, and technicians, Avient's

experts can help customers with all aspects of product improvement, from concept to production, helping to confirm that the materials perform as the brand requires.

CORE Non-Phthalate Plastisols are also included in [Avient's No Surprises Pledge](#), made to all customers and markets across the globe. This pledge includes consistently producing materials containing ingredients that conform to accepted legal and regulatory compliance guidelines.

THE IMPACT

By using Avient's CORE formulation combined with the proprietary manufacturing process from EZR Sport, the companies created an exceptional foam cell structure, providing excellent shock absorption with a cushioning effect for steady hand placement. Along with Avient's material technologies and formulation expertise, EZR Sport gun grip gauntlets can withstand the elements while maintaining appearance and aesthetics and meeting eco-conscious guidelines. As a result, EZR Gauntlet System gun grips help provide shooters with a stable and comfortable experience, improving accuracy.

In addition to meeting EZR's material needs, Avient helped improve EZR's sustainability by changing how CORE plastisols are delivered. Initially, the product was shipped in 55-gallon drums, requiring storage, valuable floor space, and disposal by a vendor for a fee. Now, CORE products are shipped in collapsible, reusable totes. Each tote holds a low-impact, disposable bladder containing five drums worth of material. The bladder can help minimize concerns surrounding liquid residue that could be hazardous, can evacuate material more efficiently, and compact after use for even more space savings. Once emptied, EZR can collapse and stack the totes to be collected by Avient for future deliveries.

"Avient's plastisol formulation has proven to be the perfect match for our stringent material performance criteria, enabling EZR to thrive," said Bob Atkinson, President of EZR. "The continuous assistance from their experts has been instrumental in ensuring our ongoing progress and achievement."

[Click here to learn more about Avient CORE™ Non-Phthalate Plastisols](#) or call 1-844-4AVIENT