

TECHNICAL BULLETIN

MATERIAL BREAKTHROUGH: VERSAFLEX™ CE BLUE JEAN STAIN RESISTANT TPES FOR WHITE OR LIGHT-COLORED PHONE CASES

Phone case brands have struggled to design white or light-colored cases that do not stain when in contact with blue jeans. Until now, silicone was the only proven material that was resistant to staining, but silicone produces a long list of challenges to phone case brands: lengthy lead times, supply chain issues, and manufacturing complexities.

Avient has formulated a new material that offers blue jean stain resistance similar to that of silicone*, yet with all the benefits of using a TPE: increased design freedom, an efficient supply chain leading to faster speed to market, and lower total part costs.

*Based on visual test results

AVIENT™

TEST METHOD: INDIGO STAIN RESISTANCE TEST

The same rigorous method used to test for staining on automotive interior seats, Ford Laboratory Test Method – BN 107-01, was used. A section of blue jeans was cut and the seam opened. Using a template, abradant circles were then traced onto the back of the fabric and cut with a pair of shears. Each denim cloth was positioned on the crock finger such that the weave was oblique to the direction of the rubbing. All specimens were subjected to two tests of 100 and 500 cycles on the test label side.

INSTRUMENT SET-UP

Instrument	Taber Linear Abraser – Model 5750
Accessory	Crockmeter attachment with 16mm acrylic finger
Abradant	Levi's™ 505 Regular Cut jeans (circular cloths cut from lower part of leg)
Stroke Length	4" (100mm)
Cycle Speed	60 cycles per minute (cpm)
Load	9N (918g)
Conditions	76° F, 47% RH [conditioned > 24 hrs]

Want to test it yourself? Visit avient.com or call +1.844.4AVIENT to request a sample.