Technical Fact Sheet

Conductrol™ Antistatic Fiber

General Description

Conductrol™ fiber combines a carbon filled acrylic (poly-acrylonitrile copolymer) fiber with an inherently conductive polymer surface to yield a fiber with stable electrical properties. Conductrol is available in a variety of forms tailored to fit different ESD control applications. Short, uncrimped staple is available in lengths from 0.5 to 7 mm for use in specialty materials like reinforced rubber, epoxy and adhesives. Crimped staple in longer lengths (up to 150 mm) is available for use in woven and non-woven industrial textiles.

Typical Physical Properties

Color	Black
Density	1.26 g/cm^3
Fiber diameter	20 - 25 µm 3 denier
Resistivity: volume filament surface	0.2 Ω-cm 4 x 10^4 Ω/cm 2.5 x 10^3 Ω/sq
Tensile Strength	320 MPa 3 g/den
Elongation	25 - 35%

Environmental Stability

With the exception of concentrated chlorine, the conductivity of Conductrol™ lasts in every environment tested for as long as the fiber lasts:

pH 3 - 11 (Room Temp)	No effect
Laundering	No effect, 75 launderings
Floor cleaners and detergents	No effect
Thermal aging, 170°C	No effect after 10 days
Chorine bleach	3x10^6 Ω/sq after 36hrs

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