

Technical Fact Sheet

# $Conductrol^{{}^{\rm TM}}$ Antistatic Fiber

## **General Description**

Conductrol<sup>™</sup> 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 Short, uncrimped staple is applications. 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 <sup>3</sup>
Fiber diameter	20 - 25 μm 3 denier
Resistivity: volume filament surface	0.2 Ω-cm 4 x 10 <sup>4</sup> Ω/cm 2.5 x 10 <sup>3</sup> Ω/sq
Tensile Strength	320 MPa 3 g/den
Elongation	25 - 35%

## **Environmental Stability**

With the exception of concentrated chlorine, the conductivity of Conductrol<sup>™</sup> 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	$3x10^{6} \Omega/sq$ after 36hrs

#### IMPORTANT NOTICE

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