

Hyperion Catalysis

T H E L E A D E R I N N A N O T U B E T E C H N O L O G Y

Select Properties for HC605 Polycarbonate (PC) Compound with FIBRIL™ Nanotubes for ESD Applications

Hyperion Catalysis International manufactures FIBRIL™ nanotubes and compounds them into a wide range of plastics to make both masterbatches and selected ready-to-mold compounds. Compounds can be tailored for varying levels of electrical conductivity including static dissipative, electrostatic discharge (ESD), or EMI / RFI shielding.

Select Electrical, Mechanical, & Processing Properties of HC605

HC605 is an ESD conductive, ready-to-use, polycarbonate (PC) molding compound intended for applications requiring maintenance of physical properties plus extremely low particle sloughing. Electrical and mechanical values provided below were obtained from injection-molded specimens following American Society for Testing & Materials (ASTM) standards. The material is black in color with a specific gravity of 1.2 (ASTM D792).

Properties (ASTM)	Value	
	SI	Imperial
Volume Resistivity (D4496)	10 ⁴ ohm-cm	10 ⁴ ohm-cm
Surface Resistivity (D4496)	10 ⁶ ohm sq	10 ⁶ ohm sq
Tensile Strength @ yield (D638)	60 MPa	8700 psi
Tensile Modulus (D638)	2700 MPa	0.39x10 ⁶ psi
Flex Strength (D790)	88 MPa	12,800 psi
Flex Modulus (D790)	2760 MPa	0.40x10 ⁶ psi
Tensile Elongation @ yield (D638)	5.6%	5.6%
Poisson's Ratio	0.39	0.39
Melt Temperature	293-302 C	560-575 F
Mold Temperature	57-66 C	135-150 F
Injection Speed	Slow	Slow

Disclaimer: Data herein is typical and should not be construed as specifications. Data are obtained from specimens molded from representative samples of the compound described herein. Properties may be materially affected by molding conditions and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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