InElec® PEEKCNT5

Product Description 5% CARBON NANO-TUBE FILLED PEEK

Material Status Commercial: Active

Availability Africa & Middle East, Asia Pacific, Europe, Latin America, North America

Filler / Reinforcement Carbon Nano, 5.0% Filler by Weight

Features Electrically Conductive, ESD Protection, Permanent Antistatic

Uses Aerospace Applications, Connectors, Consumer Applications, Electrical/Electronic Applications, Engineering Parts, Industrial Applications, Industrial Parts, Metal Replacement, Military/Defense Applications, Oil/Gas Applications, Outdoor Applications, Semiconductor Applications

Forms Pellets

Processing Method Injection Molding

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.32	g/cm³	ASTM D792

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4480	MPa	ASTM D638
Tensile Strength	103	MPa	ASTM D638
Tensile Elongation (Yield)	5.0 to 6.0	%	ASTM D638
Flexural Modulus	4830	MPa	ASTM D790
Flexural Strength	207	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm)	53	J/m	ASTM D256

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4 to 1.0E+6	ohms	ASTM D257

Injection	Nominal Value	Unit
Drying Temperature	149	°C
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	349 to 399	°C
Mold Temperature	177 to 204	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	40 to 70	rpm
Vent Depth	0.038 to 0.076	mm

Notes

[1] Typical properties: these are not to be construed as specifications.

Properties provided are only typical values and Americhem assumes no liability for the customer's use of the information provided. The customer assumes all responsibility for testing determining this products suitability in the customer's specific end application.

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