



InElec® POMCCF20

PRODUCT DESCRIPTION 20% CARBON FIBER REINFORCED COPOLYMER ACETAL

MATERIAL STATUS Commercial: Active

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

FILLER / REINFORCEMENT Carbon Fiber, 20% Filler by Weight

FEATURES Electrically Conductive, ESD Protection, Filled, Good Dimensional Stability, High Stiffness, High Strength, Permanent Antistatic

USES Consumer Applications, Electrical/Electronic Applications, Engineering Parts, Industrial Applications, Office Automation Equipment

FORMS Pellets

PROCESSING METHOD Injection Molding

PHYSICAL	NOMINAL VALUE	UNIT	TEST METHOD
Density / Specific Gravity	1.46	g/cm ³	ASTM D792
Specific Volume	0.686	cm ³ /g	
Molding Shrinkage - Flow	0.50 to 0.70	%	ASTM D955
Water Absorption (24 hr)	0.50	%	ASTM D570
MECHANICAL	NOMINAL VALUE	UNIT	TEST METHOD
Tensile Strength	148	MPa	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	13100	MPa	ASTM D790
Flexural Strength	234	MPa	ASTM D790
Shear Strength	56.5	MPa	ASTM D732
IMPACT	NOMINAL VALUE	UNIT	TEST METHOD
Notched Izod Impact (3.18 mm)	53	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	320	J/m	ASTM D4812
THERMAL	NOMINAL VALUE	UNIT	TEST METHOD
Deflection Temperature Under Load 1.8 MPa, Unannealed	163	°C	ASTM D648
CLTE - Flow	4.0E-5	cm/cm/°C	ASTM D696
ELECTRICAL	NOMINAL VALUE	UNIT	TEST METHOD
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	
FLAMMABILITY	NOMINAL VALUE	UNIT	TEST METHOD
Flame Rating (1.6 mm)	HB		UL 94



INJECTION	NOMINAL VALUE	UNIT
Drying Temperature	82	°C
Drying Time	4.0	hr
Processing (Melt) Temp	191 to 210	°C
Mold Temperature	93	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	30 to 60	rpm
Vent Depth	0.013 to 0.025	mm

NOTES

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

