

RPK C40 BK

PEEK, 40% carbon fiber reinforced, black

Property (dry as molded)				
General Properties	Condition	Value	Unit	Standard
Abbreviation	-	PEEK CF40	-	ISO 1043
Density	-	1,43	g/cm ³	ISO 1183
Melt Flow Rate	5kg, 380 °C	-	g/10'	ISO 1133
Molding Shrinkage	Parallel / Normal	-	%	ISO 15512
Moisture Content	-	<0,2	%	ISO 15512
Moisture Absorption	50% RH, 23 °C	-	%	ISO 62
Mechanical Properties	Condition	Value	Unit	standard
Stress at Break	+23 °C	275	MPa	ISO 527
Strain at Break	+23 °C	1,5	%	ISO 527
Tensile Modulus	+23 °C	32500	MPa	ISO 527
Yield Strength	+23 °C	-	MPa	ISO 527
Izod Impact, notched	+23 °C	7	kJ/m ²	ISO 180/1A
Izod Impact, notched	-30 °C	6	kJ/m ²	ISO 180/1A
Izod Impact, un-notched	+23 °C	-	kJ/m ²	ISO 180/1U
Izod Impact, un-notched	-30 °C	-	kJ/m ²	ISO 180/1U
Thermal Properties	Condition	Value	Unit	Standard
Melting Temperature	10 K/min	344	°C	ISO 11357
Heat Deformation Temperature	0.45 MPa	-	°C	ISO 75
Heat Deformation Temperature	1.80 MPa	>300	°C	ISO 75
Vicat Softening Temperature	50N	-	°C	ISO 306
Electrical Properties & Flammability	Condition	Value	Unit	Standard
Volume Resistivity	-	<1E+05	Ohm.cm	IEC 60093
Surface Resistivity	-	-	Ohm	IEC 60093
Comparative Tracking Index	Solution A	-	V	IEC 60112
Glow Wire Flammability Index (GWFI)	1/2 mm plaque	960	°C	IEC 60695
Glow Wire Ignitability Temperature (GWIT)	2 mm plaque	-	°C	IEC 60695
Flame Rating	0.75 mm	V0	-	UL 94
Flame Rating	1.6 mm	V0	-	UL 94
Processing Parameters	Condition	Value	Unit	Standard
Drying		150 / 4 – 6	°C /hr	
Feed Throat Temperature		80 – 100	°C	
Processing Temperature		350 – 390	°C	
Mold Temperature		160 – 200	°C	
Hold Pressure		80 – 100	MPa	
Back Pressure		Low	-	
Injection Speed		Fast	-	

All above information are gathered under the supervision of ReMo Polytechnic Company in laboratories. For sure there is no guarantee due to various test result under different condition process. As result this is the end users responsibilities and duties to test our products under their required processing condition, uses and by their own facilities.