

PRODUCT INFORMATION

RADITECK P RCM651K 1700 NT

PROVISIONAL

DESCRIPTION

PPS 65% glass fiber and mineral filler reinforced injection. Lubricated, easier processing. Heat stabilized. Natural colour.

Balanced matching of excellent chemical resistance, inherent flame retardancy and very good heat ageing properties retention. Suitable for parts requiring high stiffness and high mechanical strength, along with good dimensional stability and low warpage. Ease of processing thanks to good flowability.

ISO 1043: PPS-T (GF+MX)65

THE CHARACTERISTICS SHOWN HERE ARE PROVISIONAL AND REFLECT THE AVERAGE VALUES OF PROPERTIES MEASURED OVER A LIMITED NUMBER OF PRODUCTION CAMPAIGNS

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.05%. Typical conditions with a desiccant drier: temperature 115° C, dew point -20°C or below, time 3-4h or more. Avoid excessive shear rates and high thermal stresses for better processing. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature
300 - 340°C

Mold Temperature
140 - 160°C

Injection Speed
low-medium

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet
ROHS compliant 2011/65/UE and following amendments

TECHNICAL DATA SHEET

RADITECK P RCM651K 1700 NT

PROPERTY		STANDARD	UNIT	VALUE
<i>PHYSICAL PROPERTIES</i>				
Density		ISO 1183	kg/m ³	1930
Melt Flow Rate	315/5 ^[1]	ISO 1133	g/10min	50
Moulding shrinkage - Parallel / Normal	330/140/50 ^[2]	ISO 294-4	%	0.2 / 0.6
<i>MECHANICAL PROPERTIES</i>				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	23150
Stress at Break	5mm/min	ISO 527-2/1A	MPa	130
Strain at Break	5mm/min	ISO 527-2/1A	%	0.7
Flexural Modulus	2mm/min	ISO 178	MPa	23500
Flexural Strength	2mm/min	ISO 178	MPa	205
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	13
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	5
Izod Notched Impact Strength	+23°C	ISO 180/1A	kJ/m ²	5.5
<i>THERMAL PROPERTIES</i>				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	280
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	260
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	275
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	ISO 11359-1/-2	E-6/K	17.7
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	ISO 11359-1/-2	E-6/K	31.5
<i>FLAMMABILITY PROPERTIES</i>				
Flammability	0.8mm	UL 94	class	V-0
<i>ELECTRICAL PROPERTIES</i>				
Comparative Tracking Index	Sol.A	IEC 60112	-	150

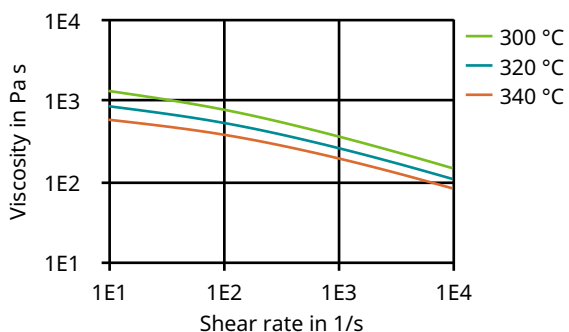
1: Temperature [°C] / Load [kg] 2: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

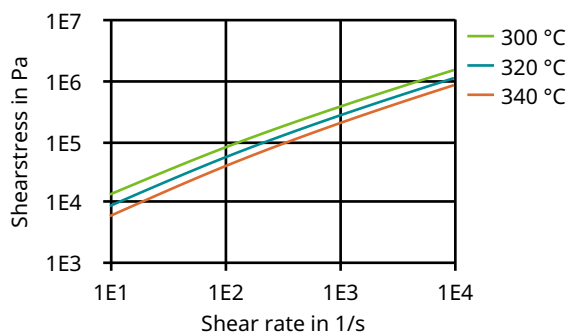
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Diagrams

Viscosity-shear rate



Shearstress-shear rate



Coeff. of linear thermal expansion, parallel

