

RADITECK P RV400K 1700 NT

DESCRIPTION

PPS 40% glass fibre reinforced injection moulding grade. Heat stabilized. Natural colour.

Balanced matching of excellent chemical resistance, inherent flame retardancy and very good heat ageing properties retention. Suitable for parts requiring very high stiffness and high mechanical strength.

ISO 1043: PPS-GF40

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
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE
PHYSICAL PROPERTIES			
Density	ISO 1183	kg/m ³	1640
Melt Flow Rate	ISO 1133	g/10min	125
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	0.1 / 0.6
MECHANICAL PROPERTIES			
Tensile Modulus	ISO 527-2/1A	MPa	16000
Stress at Break	ISO 527-2/1A	MPa	185
Strain at Break	ISO 527-2/1A	%	1.8
Flexural Modulus	ISO 178	MPa	14100
Flexural Strength	ISO 178	MPa	275
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	50
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	12
Izod Notched Impact Strength	ISO 180/1A	kJ/m ²	11
Izod Notched Impact Strength	ISO 180/1A	kJ/m ²	11
THERMAL PROPERTIES			
Melting Temperature	ISO 11357-1/-3	°C	280
Heat Deflection Temperature	ISO 75/2Af	°C	265
Heat Deflection Temperature	ISO 75/2Bf	°C	270
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	16
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	46
FLAMMABILITY PROPERTIES			
Flammability	UL 94	class	V-0
Automotive Interior Flammability	ISO 3795	mm/min	0
ELECTRICAL PROPERTIES			
Comparative Tracking Index	IEC 60112	V	125

1: Temperature [°C] / Load [kg]

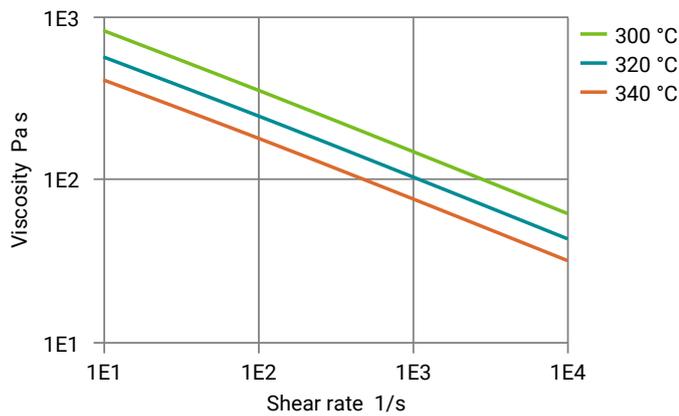
2: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



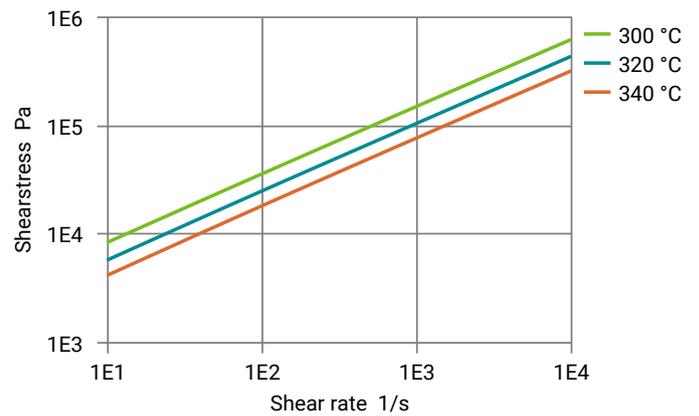
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DIAGRAMS

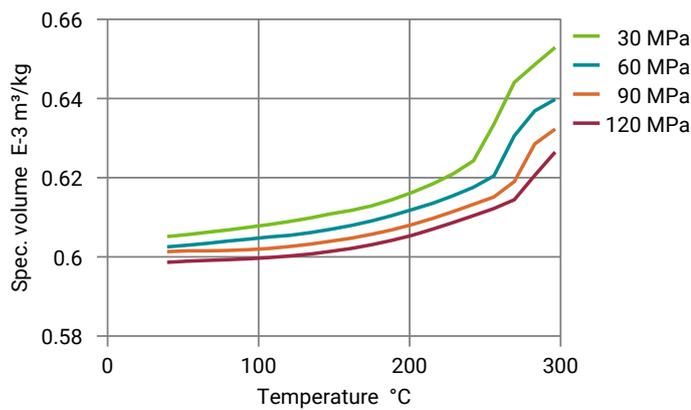
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Thermal expansion

