

Solvay Specialty Polymers Primef® 7002 Polyphenylene Sulfide (PPS), 65% Glass/Mineral (discontinued **)

Categories: [Polymer](#); [Thermoplastic](#); [Polyphenylene Sulfide \(PPS\)](#); [Polyphenylene Sulfide \(PPS\), Mineral/Glass-Fiber Filled](#)

Material Notes: Primef 7002 is a 65% mineral/glass fiber reinforced polyphenylene sulfide (PPS). This grade offers higher fluidity than Primef 7010 (also 65% mineral/glass fiber), but with somewhat lower mechanical properties. In general, PPS offers an excellent balance of properties including high temperature resistance, chemical resistance, dimensional stability and electrical characteristics. Because of its inherent flame retardancy, PPS is a good choice for high-temperature electrical and electronic applications.

Features: Flame Retardant; Good Chemical Resistance; Good Creep Resistance; Good Dimensional Stability; Good Processability; High Flow; High Heat Resistance; Low to No Water Absorption

Uses:

Availability: Europe

Holding Time: 3 sec
Cooling Time, 2 mm: 2.5 sec



Information provide by Solvay Specialty Polymers

Vendors: [Click here to view all available suppliers for this material.](#)

Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.96 g/cc	0.0708 lb/in ³	ISO 1183
Linear Mold Shrinkage	0.0010 - 0.0020 cm/cm	0.0010 - 0.0020 in/in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	160 MPa @Temperature 23.0 °C	23200 psi @Temperature 73.4 °F	ISO 527-2
Elongation at Break	1.2 % @Temperature 23.0 °C	1.2 % @Temperature 73.4 °F	ISO 527-2
Tensile Modulus	20.0 GPa @Temperature 23.0 °C	2900 ksi @Temperature 73.4 °F	ISO 527-2
Flexural Strength	240 MPa @Temperature 23.0 °C	34800 psi @Temperature 73.4 °F	ISO 178
Flexural Modulus	21.0 GPa @Temperature 23.0 °C	3050 ksi @Temperature 73.4 °F	ISO 178
Izod Impact, Notched	0.800 J/cm	1.50 ft-lb/in	ASTM D256
Izod Impact, Unnotched	2.50 J/cm	4.68 ft-lb/in	ASTM D256

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Dielectric Constant 	4.9 @Frequency 1.00e+6 Hz	4.9 @Frequency 1.00e+6 Hz	IEC 60250
	5.0 @Frequency 1000 Hz	5.0 @Frequency 1000 Hz	IEC 60250
Dielectric Strength	15.0 kV/mm	381 kV/in	IEC 60243-1
Dissipation Factor 	0.0090 @Frequency 1.00e+6 Hz	0.0090 @Frequency 1.00e+6 Hz	IEC 60250
	0.030 @Frequency 1000 Hz	0.030 @Frequency 1000 Hz	IEC 60250
Comparative Tracking Index	200 V	200 V	IEC 60112

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.600 W/m-K	4.16 BTU-in/hr-ft ² -°F	ISO 8302
Maximum Service Temperature, Air	220 °C	428 °F	ASTM D794
Deflection Temperature at 1.8 MPa (264 psi)	>= 260 °C	>= 500 °F	ISO 75-2/A
Flammability, UL94	V-0 @Thickness 0.800 mm	V-0 @Thickness 0.0315 in	
Oxygen Index	58 %	58 %	ISO 4598-2

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	290 - 300 °C	554 - 572 °F	
Middle Barrel Temperature	310 - 320 °C	590 - 608 °F	
Front Barrel Temperature	320 - 330 °C	608 - 626 °F	
Nozzle Temperature	320 - 350 °C	608 - 662 °F	
Melt Temperature	320 - 330 °C	608 - 626 °F	
Mold Temperature	150 - 160 °C	302 - 320 °F	

Injection Pressure	50.0 - 150 MPa	7250 - 21800 psi
Hold Pressure	30.0 - 150 MPa	4350 - 21800 psi
Back Pressure	0.000 - 1.00 MPa	0.000 - 145 psi
Screw Speed	3.0 - 10 rpm	3.0 - 10 rpm

Descriptive Properties

Additional Properties	Spiral Flow Length - Internal Method: 150 mm
Forms	Pellets
Injection Rate	Fast
Processing Method	Injection Molding
RoHS Compliance	RoHS Compliant

**

Materials flagged as discontinued (D) are no longer part of the manufacturer's standard product line according to our latest information. These materials may be available by special order, in distribution inventory, or reinstated as an active product. Data sheets from materials that are no longer available remain in MatWeb to assist users in finding replacement materials.

Users of our Advanced Search (registration required) may exclude discontinued materials from search results.

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