

## 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	<a href="#">1.96</a> g/cc	<a href="#">0.0708</a> lb/in <sup>3</sup>	ISO 1183
Linear Mold Shrinkage	<a href="#">0.0010</a> - <a href="#">0.0020</a> cm/cm	<a href="#">0.0010</a> - <a href="#">0.0020</a> in/in	ISO 294-4

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

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


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

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	<a href="#">290</a> - <a href="#">300</a> °C	<a href="#">554</a> - <a href="#">572</a> °F	
Middle Barrel Temperature	<a href="#">310</a> - <a href="#">320</a> °C	<a href="#">590</a> - <a href="#">608</a> °F	
Front Barrel Temperature	<a href="#">320</a> - <a href="#">330</a> °C	<a href="#">608</a> - <a href="#">626</a> °F	
Nozzle Temperature	<a href="#">320</a> - <a href="#">350</a> °C	<a href="#">608</a> - <a href="#">662</a> °F	
Melt Temperature	<a href="#">320</a> - <a href="#">330</a> °C	<a href="#">608</a> - <a href="#">626</a> °F	
Mold Temperature	<a href="#">150</a> - <a href="#">160</a> °C	<a href="#">302</a> - <a href="#">320</a> °F	
Injection Pressure	<a href="#">50.0</a> - <a href="#">150</a> MPa	<a href="#">7250</a> - <a href="#">21800</a> psi	
Hold Pressure	<a href="#">30.0</a> - <a href="#">150</a> MPa	<a href="#">4350</a> - <a href="#">21800</a> psi	
Back Pressure	<a href="#">0.000</a> - <a href="#">1.00</a> MPa	<a href="#">0.000</a> - <a href="#">145</a> psi	
Screw Speed	<a href="#">3.0</a> - <a href="#">10</a> rpm	<a href="#">3.0</a> - <a href="#">10</a> 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

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Materials flagged as discontinued (  ) 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.

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