# China PPS hGR60

### Polyphenylene Sulfide

Sichuan Deyang Chemical Co., Ltd

#### Message:

PPS-hGR60 is glass reinforced PPS compound, which is filled with glass fiber based on the PPS resin. The characteristic of PPS compounds includes good mechanical properties, high rigidity, high creep resistance, high temperature resistance, flame resistance, chemical resistance, excellent electrical insulation properties, arc resistance, low water absorption, low mold shrinkage, easy processing, good dimensional stability, and radiation resistance. Owing to its high performance, PPS-hGR60 is widely used in space aviation, chemical, electronic appliances, mechanical, automobile, railway fields etc. It can be used to make elements where high temperature resistance, electrical insulation are all-important in aviation; anticorrosion valves and electrical insulating parts; precise plugs; parts of engines, terminal etc.

General Information					
Filler / Reinforcement	Glass fiber reinforced material, 40% filler by weight Mineral filler, 25% filler by weight				
Features	Good dimensional stability				
	Low friction coefficient				
	Insulation				
	Anti-arc				
	Anti-gamma radiation				
	Workability, good				
	Good creep resistance				
	Good chemical resistance				
	Heat resistance, high				
	Low shrinkage				
	Flame retardancy				
Uses	Electrical/Electronic Applications				
	Electrical appliances				
	Application in Automobile Field				
	Shell				
Processing Method	Injection molding				
Physical	Nominal Value	Unit	Test Method		
Density	1.78	g/cm³	Internal method		
Molding Shrinkage			Internal method		
Flow	0.25	%	Internal method		
Transverse flow	0.75	%	Internal method		
Hardness	Nominal Value	Unit	Test Method		
Rockwell Hardness <sup>1</sup>	112		Internal method		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Strength	162	MPa	Internal method		

Tensile Elongation (Break)	1.7	%	Internal method
Flexural Modulus	19400	MPa	Internal method
Flexural Strength	250	MPa	Internal method
Compressive Strength	137	MPa	Internal method
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	12	kJ/m²	Internal method
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	267	°C	Internal method
Melting Temperature	282	°C	Internal method
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.5E+15	ohms	Internal method
Volume Resistivity	2.1E+16	ohms·cm	Internal method
Dielectric Strength	17	kV/mm	Internal method
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		Internal method
Injection	Nominal Value	Unit	
Drying Temperature	110 - 140	°C	
Drying Time	3.0 - 5.0	hr	
Rear Temperature	270 - 290	°C	
Middle Temperature	300 - 320	°C	
Front Temperature	300 - 320	°C	
Front Temperature Nozzle Temperature	300 - 320 290 - 320		
		°C	
Nozzle Temperature	290 - 320	°C °C	
Nozzle Temperature Processing (Melt) Temp	290 - 320 160 - 180	°C °C °C	
Nozzle Temperature Processing (Melt) Temp Mold Temperature	290 - 320 160 - 180 100 - 150	°C ℃ ℃	
Nozzle Temperature Processing (Melt) Temp Mold Temperature Injection Pressure	290 - 320 160 - 180 100 - 150 50.0 - 100	°C ℃ ℃ ℃ MPa	
Nozzle Temperature Processing (Melt) Temp Mold Temperature Injection Pressure Back Pressure	290 - 320 160 - 180 100 - 150 50.0 - 100 0.100 - 1.00	°C °C °C MPa MPa	
Nozzle Temperature Processing (Melt) Temp Mold Temperature Injection Pressure Back Pressure Screw Speed	290 - 320 160 - 180 100 - 150 50.0 - 100 0.100 - 1.00	°C °C °C MPa MPa	
Nozzle Temperature Processing (Melt) Temp Mold Temperature Injection Pressure Back Pressure Screw Speed Injection instructions	290 - 320 160 - 180 100 - 150 50.0 - 100 0.100 - 1.00	°C °C °C MPa MPa	

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