# China PPS MI-hGR50

## Polyphenylene Sulfide

Sichuan Deyang Chemical Co., Ltd

### Message:

PPS/MI-hGR50 is toughing PPS compound, which is filled with glass fiber and special toughening ingredients based on the PPS resin. Good mechanical properties, high temperature resistance, solvent resistance, excellent electrical insulation properties, high intensity, low water absorption, low mold shrinkage, good dimensional stability, and radiation resistance. Without the defect of PPS's inherent brittleness, it can be used in more fields to replace other plastic materials.

Owing to its high performance, it can be used to make appliances where high intensity, high-temperature, electrical insulation and toughness are both required. Such as: rotproof valves and valve circles, outer shells of precise electric appliance; thick wall panels, slide blocks, panels of braking system magnetic valves, gears, thermocouple and piston rings etc.

General Information				
Filler / Reinforcement	Glass fiber reinforced material			
Additive	Impact modifier			
Features	Good dimensional stability			
	Impact modification			
	Insulation			
	Anti-gamma radiation			
	Solvent resistance			
	Heat resistance, high			
Uses	Electrical appliances			
	Valve/valve components			
	Parts under the hood of a car			
Processing Method	Injection molding			
Physical	Nominal Value	Linit	Test Method	
- Hyoroda		Onit	rest method	
Density	1.65	g/cm <sup>3</sup>	Internal method	
Density Molding Shrinkage - Flow	1.65 0.25	g/cm <sup>3</sup> %	Internal method Internal method	
Density Molding Shrinkage - Flow Hardness	1.65 0.25 Nominal Value	g/cm <sup>3</sup> % Unit	Internal method Internal method Test Method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup>	1.65       0.25       Nominal Value       106	g/cm <sup>3</sup> % Unit	Internal method Internal method Test Method Internal method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical	1.65       0.25       Nominal Value       106       Nominal Value	g/cm <sup>3</sup> % Unit Unit	Internal method Internal method Test Method Internal method Internal method Test Method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical Tensile Strength	1.65       0.25       Nominal Value       106       Nominal Value       130	g/cm <sup>3</sup> % Unit Unit MPa	Internal method Internal method Test Method Internal method Internal method Internal method Internal method Internal method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical Tensile Strength Tensile Elongation (Break)	1.65       0.25       Nominal Value       106       Nominal Value       130       1.9	g/cm <sup>3</sup> % Unit Unit MPa %	Internal method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical Tensile Strength Tensile Elongation (Break) Flexural Modulus	Nominal Value1.650.25Nominal Value106Nominal Value1301.914700	g/cm <sup>3</sup> % Unit Unit MPa % MPa	Internal method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength	1.65       0.25       Nominal Value       106       Nominal Value       130       1.9       14700       207	g/cm <sup>3</sup> % Unit Unit MPa % MPa MPa	Internal method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Impact	Nominal Value1.650.25Nominal Value106Nominal Value1301.914700207Nominal Value	g/cm <sup>3</sup> % Unit Unit MPa % MPa MPa MPa Unit	Internal method Internal method Test Method Internal method Internal method Internal method Internal method Internal method Internal method Internal method Internal method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Impact Notched Izod Impact	1.65       0.25       Nominal Value       106       Nominal Value       130       1.9       14700       207       Nominal Value       18	g/cm <sup>3</sup> % Unit Unit MPa % MPa MPa Unit kJ/m <sup>2</sup>	Internal method Internal method Test Method Internal method Internal method Internal method Internal method Internal method Internal method Internal method Internal method	
Density Molding Shrinkage - Flow Hardness Rockwell Hardness <sup>1</sup> Mechanical Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Impact Notched Izod Impact Thermal	Nominal Value1.650.25Nominal Value106Nominal Value1301.914700207Nominal Value18Nominal Value	g/cm <sup>3</sup> % Unit Unit MPa % MPa MPa Unit Lunit kJ/m <sup>2</sup>	Internal method Internal method Test Method Internal method	
Density   Molding Shrinkage - Flow   Hardness   Rockwell Hardness <sup>1</sup> Mechanical   Tensile Strength   Tensile Elongation (Break)   Flexural Modulus   Flexural Strength   Impact   Notched Izod Impact   Thermal   Deflection Temperature Under Load (1.8 MPa, Unannealed)	Nominal Value1.650.25Nominal Value106Nominal Value1301.914700207Nominal Value18Nominal Value263	g/cm³ % Unit Unit MPa % MPa MPa Unit Unit kJ/m² Unit	Internal method Internal metho	

Melting Temperature	280	°C	Internal method
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	2.7E+14	ohms	Internal method
Volume Resistivity	3.1E+16	ohms·cm	Internal method
Dielectric Strength	18	kV/mm	Internal method
Dielectric Constant (1 MHz)	4.00		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	
Nozzle Temperature	290 - 320	°C	
Processing (Melt) Temp	120 - 180	°C	
Mold Temperature	100 - 150	°C	
Injection Pressure	50.0 - 100	MPa	
Back Pressure	0.100 - 1.00	MPa	
Screw Speed	40 - 100	rpm	
Injection instructions			
Processing time: 2 to 16hr			
NOTE			
1.	HR		

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