China PPS hGR40

Polyphenylene Sulfide

Sichuan Deyang Chemical Co., Ltd

Message:

PPS-hGR40 (natural color) and PPS-hGR41 (black) 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 creep resistance, high temperature resistance, friction resistance, flame resistance, chemical resistance, excellent electrical insulation properties, arc resistance, low mold shrinkage, easy processing good dimensional stability, and radiation resistance.
Owing to its high performance, PPS-hGR40 is widely used in space aviation, chemical, electronic/electric, mechanical industry, 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, outer shells and high temperature resistant contactors; electric parts, terminal and switch; carburetor, distributor, igniter, slide block, gears, thermocouple, piston rings with requirement of high temperature resistance and precision dimension; hot-air tube, crisping iron, hair curler, coffeepot.

General Information	
Filler / Reinforcement	Glass fiber reinforced material
Features	Good dimensional stability Low friction coefficient High strength 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 components Electrical appliances Valve/valve components Aerospace applications Application in Automobile Field Wall seat
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Density	1.70	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 [1]	111		Internal method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	180	MPa	Internal method
Tensile Elongation (Break)	1.8	%	Internal method
Flexural Modulus	13600	MPa	Internal method
Flexural Strength	272	MPa	Internal method
Compressive Strength	130	MPa	Internal method
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	14	kJ/m^2	Internal method
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	265	°C	Internal method
Melting Temperature	282	°C	Internal method
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	5.0E+14	ohms	Internal method
Volume Resistivity	5.0E+16	ohms·cm	Internal method
Dielectric Strength	17	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	160 - 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: 4 to 16hr			
NOTE			
1.	HR		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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