Ranger PBT PBT-403-M-G10 HF

Polybutylene Terephthalate

Beijing Ranger Chemical Co., Ltd.

Message:

Unreinforced grades have abundant strength and flexibility, and have strong characteristics against brittleness.
UL-certified slow-burning(94HB) and self-extinguishing grades(94V-0,V-2) exist, and electrical properties exhibited are the highest of any thermoplastic.
Low water absorption is exhibited, and excellent electrical properties(CTI and GWIT) are retained over extended periods of usages, even with widely varied temperature and humidity conditions.
The surface of molded products is smooth, and a low coefficient of friction is exhibited.As the amount of froction is low, PBT is suitable for use in application requiring friction and wear properties.
The material is exceptionally reliable, with small in-use dimensional variation, and superior molding stability and dimensional precision.
Long-term chemical resistance is exceptional, and at room temperature, there is almost no degradation in properties after.
Both unreinforced and reinforced grades exhibit exceptional flowability, and excellent processability.
Application:VCD drive frames\ Connectors\ Trimmers\ Switch buttons for gas-fired instantaneous water heaters\ Relay blocks\ Driers\ Rectifiers\ Outer handles\ Height sensor cases\ Door mirror stays\ Drive component housings\ Energy saving lamp.

General Information	
Features	Good dimensional stability
	Low friction coefficient
	High strength
	Workability, good
	Good electrical performance
	Good liquidity
	Good flexibility
	Good chemical resistance
	Halogen-free
	Low or no water absorption
	Excellent appearance
	Flame retardancy
Uses	Electrical/Electronic Applications
	Application in Automobile Field
	Shell
Forms	Particle
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.45	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.60 - 1.1	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.070	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	70.0	MPa	ASTM D638
Flexural Modulus	5000	MPa	ASTM D790

Flexural Strength	120	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	6.0	kJ/m²	ASTM D256
Unnotched Izod Impact Strength	35	kJ/m²	ASTM D256
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity (2.00 mm)	2.0E+16	ohms·cm	ASTM D257
Dielectric Strength (2.00 mm)	24	kV/mm	ASTM D149
Dielectric Constant (50 Hz)	3.60		ASTM D150
Dissipation Factor (50 Hz)	2.0E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.800 mm	V-0		UL 94
3.20 mm	V-0		UL 94
Injection	**Nominal Value**	**Unit**	
Rear Temperature	225 - 245	°C	
Middle Temperature	225 - 245	°C	
Front Temperature	225 - 245	°C	
Nozzle Temperature	240	°C	
Mold Temperature	60.0 - 80.0	°C	
Injection Pressure	40.0 - 100	MPa	
Back Pressure	4.00 - 15.0	MPa	
Screw Speed	< 100	rpm	

Injection instructions

Injection Time: 3 to 15 secTime Pressure: 2 to 5 secTotal Cycle: 15 to 50 sec

Recommended distributors for this material

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