

Vexel 4450

Polybutylene Terephthalate
Custom Resins Group

Message:

Vexel 4450 is a Polybutylene Terephthalate (PBT) material filled with 45% glass fiber. It is available in North America for injection molding. Important attributes of Vexel 4450 are:

Good Stiffness
Heat Resistant
High Strength

Typical applications include:
Electrical/Electronic Applications
Housings

General Information			
Filler / Reinforcement	Glass Fiber,45% Filler by Weight		
Features	Good Electrical Properties		
	Good Stiffness		
	High Heat Resistance		
	High Strength		
Uses	Electrical Housing		
	Electrical Parts		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.67	g/cm ³	ASTM D792
Molding Shrinkage			ASTM D955
Flow	0.20 to 0.40	%	
Across Flow	0.40 to 0.60	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	152	MPa	ASTM D638
Flexural Modulus	11700	MPa	ASTM D790
Flexural Strength	241	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	80	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	216	°C	
1.8 MPa, Unannealed	210	°C	
Melting Temperature	227	°C	
Injection	Nominal Value	Unit	

Drying Temperature	121 to 138	°C
Drying Time	2.0 to 4.0	hr
Drying Time, Maximum	4.0	hr
Suggested Max Moisture	0.040	%
Suggested Shot Size	30 to 80	%
Suggested Max Regrind	25	%
Rear Temperature	232 to 249	°C
Middle Temperature	238 to 254	°C
Front Temperature	243 to 266	°C
Nozzle Temperature	249 to 282	°C
Processing (Melt) Temp	243 to 266	°C
Mold Temperature	54.4 to 107	°C
Injection Pressure	68.9 to 124	MPa
Injection Rate	Moderate-Fast	
Holding Pressure	55.2 to 96.5	MPa
Back Pressure	0.00 to 3.45	MPa

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

