

Celazole® (T Series) TF-60V

Polybenzimidazole

PBI Performance Products, Inc.

Message:

Celazole TF-60V is a glass-reinforced blend offering thermal and electrical insulation, wear resistance and dimensional stability with the cost efficiency of a direct form process. An excellent choice for high temperature electrical insulators, plasma torch drag cup shields, swirl baffles and parts requiring minimal thermal expansion.

General Information			
Filler / Reinforcement	Glass Fiber		
Features	Electrically Insulating		
	Good Chemical Resistance		
	Good Dimensional Stability		
	Good Wear Resistance		
	High Heat Resistance		
Uses	Electrical/Electronic Applications		
Forms	Pellets		
Processing Method	Extrusion		
	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.52	g/cm ³	
Water Absorption			ASTM D570
23°C, 24 hr	0.25	%	
Equilibrium	4.6	%	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (A-Scale)	30		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	12100	MPa	ASTM D638
Tensile Strength	152	MPa	ASTM D638
Tensile Elongation (Break)	1.4	%	ASTM D638
Flexural Modulus	12500	MPa	ASTM D790
Flexural Strength	225	MPa	ASTM D790
Compressive Modulus	3650	MPa	ASTM D695
Compressive Strength	221	MPa	ASTM D695
Poisson's Ratio	0.34		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	310	°C	ASTM D648
CLTE - Flow (24 to 149°C)	1.6E-5	cm/cm/°C	TMA

Thermal Conductivity (24°C)	0.36	W/m/K	ASTM F433
Heat Capacity (70°C)	1130	J/kg/°C	DSC
Temperature of Initial Weight Loss			Internal Method
Air	607	°C	
Nitrogen	635	°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	16	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
1 kHz	3.90		
10 kHz	3.90		
Dissipation Factor			ASTM D150
1 kHz	0.0		
10 kHz	1.0E-3		
Arc Resistance	180	sec	ASTM D495

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

