

Valiant® PEI-VAT002G20

Description

PEI-VAT002G20 is a 20% glass fiber reinforced amorphous polyetherimide (PEI) resin, standard flow with a high glass transition temperature (T_g) of 217°C. Features are excellent mechanical, electrical and dimensional properties up to high temperatures.

Physical Properties	Units	Test Standard	Value
Density	g/cm ³	ISO 1183	1.42
Melt Flow Rate (337°C/6.6kg)	g/10min	ASTM D1238	5-6
Mold Shrinkage	%	ISO 2577, 294-4	0.3-0.5
Water Absorption (23°C/24hrs)	%	ASTM D570	0.2

Mechanical Properties

Tensile Stress	Mpa	ASTM D638	130
Tensile Modulus	MPa	ASTM D638	6500
Elongation at Break	%	ASTM D638	3.0
Flexural Strength	Mpa	ASTM D790	210
Flexural Modulus	Mpa	ASTM D790	6500
Notched Impact Strength	kJ/m ²	GB/T1843	7.0

Thermal Properties

HDT 1.82Mpa	°C	ASTM D648	205
CLTE (MD/TD)	10 ⁻⁵ /°C	ASTM D696	2.5/2.5
Glass Transition Temp.	°C	GB/T19466.2-2004	217

Electrical Properties

Dielectric Strength (Air, 1.6mm)	KV/mm	IEC 60243-1	25
Dielectric Constant (1MHz)		IEC 60250	3.5
Dissipation Factor (1MHz)		IEC 60250	0.0045
Volume Resistivity	Ω·cm	IEC 60093	10 ¹⁵
Surface Resistivity	Ω	IEC 60093	10 ¹⁵

Injection Molding

Pre-Dry Temp/Time	°C/h		150/ > 4
Mold Temp.	°C		130-180
Nozzle Temp.	°C		330-400
Front Temp.	°C		345-400
Middle Temp.	°C		340-400
Rear Temp.	°C		325-400

Disclaimer

Please refer to Material Safety Data before using this product. The information contained in this data sheet is based on tests of research of Valiant Co., Ltd. The user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Valiant no warranty is given concerning the accuracy or completeness thereof.