AkiZen AG
Seeberstrasse 7
CH-4132 Muttenz

AkiZen
Asia ◦ Europe ◦ India

Product Information

Product name: PEI VAT002

Description
PEI 002 is an unreinforced general-purpose, amorphous, amber Polyetherimide (PEI) resin with high Tg, high heat resistance, high strength and modulus. Without adding any additives, it has natural flame retardancy and low smoke and HDT up to 220°C.

Item	Unit	Typical value	Method
Density	g/cm	1.27	ISO 1183
MFR (337C/ 6.7 kg)	g/10min.	8-9	ISO 1133
Water absorption (23°C, sat.)	%	0.2	ISO 62
Mould Shrinkage (length/across)	%	0.5-0.7	ISO 2577, 294-4
Flexural Strength	MPa	150	ISO 178
Flexural Modulus (23 °C)	MPa	3100	ISO 178
Tensile Stress (50 mm/min)	MPa	108	ISO 527
Tensile Modulus (1 mm/min)	MPa	3550	ISO 527
Elongation at break (23 °C)	%	61	ISO 527
Charpy Impact	kJ/m^2	6.5	ISO180/A
Tg (10°C/min)	°C	217	ISO 11357
HDT	°C	193	ISO 75
Linear expansion coefficient (parallel/quer)	10^{-4}/ °C	0.52/0.52	ISO 11359-2
Flammability (1.5 mm)		V-0	UL-94
Oxygen Index	%	47	
Dielectric Strength (60*60*1 mm^3)	kV/mm	32	IEC 60243
Dielectric Constant (100 Hz)		3.15	IEC 60250
Dielectric Constant (1000 Hz)		3.15	IEC 60250
Dissipation Factor (100 Hz)	10^{-7}	1.5	IEC 60250
Dissipation Factor (1000 Hz)	10^{-7}	1.3	IEC 60250
Volume Resistance (100V)	Ω cm	10^{15}	IEC 60093
Surface Resistance (100V)	Ω	10^{15}	IEC 60093
Comparative Tracking Index (CTI)	V	150	IEC 60112

Packaging
Bags, big bags

Storage
Protect from light and store in a dry place at room temperature

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Injection Moulding Process Guide		
	Drying temperature °C	150
	Drying time, hours	4-6
	Temperature of T1 °C	330-400
	Temperature of T2 °C	340-405
	Temperature of T3 °C	345-415
	Mold temperature °C	140-180
The processing of the material should be done as gently as possible in order to keep properties and fibre length in the final part. Pressure, injection speed and temperature should also be aligned to the dimension and shape of the part and injection moulding line.		

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