

Product Texts

20% Glass fiber filled, enhanced flow Polyetherimide (Tg 217C). ECO Conforming. For medical devices and pharmaceutical applications. Healthcare management of change, biocompatible (ISO 10993 or USP Class VI); food contact compliant; Steam, Gamma, EtO, and E-beam sterilizable.

UL Yellow Card Link [E121562-221093](https://www.ulprospector.com/usa/Products/PEI-GF20)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	7	cm ³ /10min	ISO 1133
Temperature	360	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	6	g/10min	ASTM D 1238
Temperature	337	°C	-
Load	6.6	kg	-
Mechanical properties			
ISO Data			
Tensile Modulus	6890	MPa	ISO 527
Yield stress	131	MPa	ISO 527
Yield strain	4	%	ISO 527
Stress at break	131	MPa	ISO 527
Strain at break	4	%	ISO 527
Flexural modulus	6890	MPa	ISO 178
Charpy notched impact strength, +23°C	65	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	64	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	70	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	6890	MPa	ASTM D 638
Tensile Strength at Yield	131	MPa	ASTM D 638
Tensile Strength at Break	131	MPa	ASTM D 638
Elongation at Yield	4	%	ASTM D 638
Elongation at Break	4	%	ASTM D 638
Flexural Modulus	6850	MPa	ASTM D 790
Izod Impact notched, 1/8 in	64	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	70	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	480	J/m	ASTM D 256
Thermal properties			
ISO Data			
Vicat softening temperature, B	212	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	218	°C	ISO 306
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	1.9	mm	-
ASTM Data			
DTUL @ 264 psi	208	°C	ASTM D 648
Vicat Temperature	220	°C	ASTM D 1525
Other properties			
Water absorption	1	%	Sim. to ISO 62
Humidity absorption	0.55	%	Sim. to ISO 62
Density	1420	kg/m ³	ISO 1183
Density	1420	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	350 - 400	°C	-
Mold temperature	135 - 165	°C	-
Zone 1	330 - 400	°C	-
Zone 2	340 - 400	°C	-
Zone 3	345 - 400	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Applications

Medical

Special Characteristics

Ethylene Oxide (EtO) Sterilization, Steam sterilization, Gamma irradiation sterilization, Electron beam (e-beam) sterilization

Regional Availability

North America

Certifications

Food contact, Food approval FDA 21 CFR, US Pharmacopeia Class VI Approved