ULTEM™ Resin SF2250EPR

PEI-GF20 Saudi Basic Industries Corporation (SABIC)

Product Texts

20% Glass fiber filled, super high flow polyetherimide(PEI) (TG 217degC) with internal mold release and balance properties with flow and ductility, ECO conforming, UL94 V0 listing.

UL Yellow Card Link E207780-104394172

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**12**	cm³/10min	ISO 1133
Temperature	**360**	°C	-
Load	**2.16**	kg	-
Thermal conductivity of melt	**0.28**	W/(m K)	-
Spec. heat capacity of melt	**2230**	J/(kg K)	-
Ejection temperature	**199**	°C	-
ASTM Data			
Melt Flow Index, MFI	**12.9**	g/10min	ASTM D 1238
Temperature	**360**	°C	-
Load	**2.16**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**8750**	MPa	ISO 527
Stress at break	**136**	MPa	ISO 527
Strain at break	**2.3**	%	ISO 527
Flexural modulus	**7620**	MPa	ISO 178
Charpy impact strength, +23°C	**35**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**8.5**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	**30**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**8.8**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**9057**	MPa	ASTM D 638
Tensile Strength at Break	**145**	MPa	ASTM D 638
Elongation at Break	**2.5**	%	ASTM D 638
Flexural Modulus	**7796**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**79.7**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**368**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**203**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**209**	°C	ISO 75-1/-2
Vicat softening temperature, B	**210**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**211**	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.6**	mm	-
ASTM Data			
DTUL @ 66 psi	**207**	°C	ASTM D 648
DTUL @ 264 psi	**201**	°C	ASTM D 648
Vicat Temperature	**212**	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	**1430**	kg/m³	ISO 1183
Density	**1430**	kg/m³	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	-

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Mold temperature	**135 - 165**	°C	-
Zone 1	**330 - 400**	°C	-
Zone 2	**345 - 400**	°C	-
Zone 3	**345 - 400**	°C	-
Screw speed	**40 - 70**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Regional Availability
North America, Europe, Asia Pacific

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