ULTEM™ Resin 2110R - Europe

PEI-GF10 — Saudi Basic Industries Corporation (SABIC)

Product Texts

10% Glass fiber filled, enhanced flow Polyetherimide (Tg 217C) with internal mold release. ECO Conforming, UL94 V0 and 5VA listing.

UL Yellow Card Link E121562-100732301

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**13**	cm³/10min	ISO 1133
Temperature	**360**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**4500**	MPa	ISO 527
Stress at break	**115**	MPa	ISO 527
Strain at break	**4**	%	ISO 527
Flexural modulus	**4500**	MPa	ISO 178
Charpy impact strength, +23°C	**35**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**35**	kJ/m²	ISO 179/1eU
Izod impact strength, +23°C, 4mm	**30**	kJ/m²	ISO 180/1U
Izod impact strength, -30°C, 4mm	**30**	kJ/m²	ISO 180/1U
Ball indentation hardness	**140**	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	**223**	°C	ISO 306
Vicat softening temperature, B	**212**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**217**	°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	-
Thermal Conductivity	**0.24**	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (3)	**3.2**	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**2.9**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**25**	E-4	IEC 62631-2-1
Volume resistivity	**1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
Electric strength	**34**	kV/mm	IEC 60243-1
Comparative tracking index	**150**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	**1**	%	Sim. to ISO 62
Humidity absorption	**0.6**	%	Sim. to ISO 62
Density	**1340**	kg/m³	ISO 1183

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	**370 - 410**	°C	-
Mold temperature	**140 - 180**	°C	-
Feed temperature	**80 - 120**	°C	-
Zone 1	**340 - 395**	°C	-

Zone 2	**350 - 405**	°C	-
Zone 3	**360 - 415**	°C	-

Characteristics

Processing
Injection Molding

Applications
Automotive

Regional Availability
Europe