ULTEM™ Resin CRS5201R - Europe

PEI-GF20 — Saudi Basic Industries Corporation (SABIC)

Product Texts

20% Glass fiber filled, standard flow Polyetherimide copolymer (Tg 225C) with internal mold release and enhanced chemical resistance to strong acids, bases, aromatics, and ketones. ECO Conforming.

UL Yellow Card Link E121562-103873032

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

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**7200**	MPa	ISO 527
Stress at break	**135**	MPa	ISO 527
Strain at break	**3**	%	ISO 527
Flexural modulus	**5800**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**40**	kJ/m²	ISO 180/1U
Izod impact strength, -30°C, 4mm	**40**	kJ/m²	ISO 180/1U
Ball indentation hardness	**145**	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	**225**	°C	ISO 306
Vicat softening temperature, B	**220**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**222**	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
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	**3**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**43**	E-4	IEC 62631-2-1
Volume resistivity	**1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
Comparative tracking index	**150**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	**1**	%	Sim. to ISO 62
Humidity absorption	**0.2**	%	Sim. to ISO 62
Density	**1430**	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 - 100**	°C	-
Zone 1	**350 - 390**	°C	-
Zone 2	**370 - 410**	°C	-
Zone 3	**380 - 420**	°C	-

Characteristics

Processing
Injection Molding

Applications
Automotive

Chemical Resistance
General Chemical Resistance

Regional Availability
Europe