ULTEM™ Resin AUT200 - Europe

PEI — Saudi Basic Industries Corporation (SABIC)

Product Texts

Transparent high flow Polyetherimide (Tg 217C). Very low outgassing and plateout, for automotive lighting applications where highly metallized, reflective surfaces are required. Haze onset temperature of 204C (SABIC IP method)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**25**	cm³/10min	ISO 1133
Temperature	**360**	°C	-
Load	**5**	kg	-
ASTM Data			
Melt Flow Index, MFI	**17.8**	g/10min	ASTM D 1238
Temperature	**337**	°C	-
Load	**6.7**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**3200**	MPa	ISO 527
Yield stress	**105**	MPa	ISO 527
Yield strain	**6**	%	ISO 527
Stress at break	**85**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**3300**	MPa	ISO 178
Charpy notched impact strength, +23°C	**3**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	**N**	kJ/m²	ISO 180/1U
Izod impact strength, -30°C, 4mm	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**5**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**5**	kJ/m²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**193**	°C	ISO 75-1/-2
Vicat softening temperature, A	**215**	°C	ISO 306
Vicat softening temperature, B	**211**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**212**	°C	ISO 306

Other properties	Value	Unit	Test Standard
Water absorption	**1.25**	%	Sim. to ISO 62
Humidity absorption	**0.7**	%	Sim. to ISO 62
Density	**1270**	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	**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

Automotive

Special Characteristics
Transparent

Regional Availability
Europe