SABIC Innovative Plastics™

Ultem* Resin AUR200G6 Europe-Africa-Middle East: COMMERCIAL

The data listed in this data sheet are the lower specification limits, apart from the MFR, CTE, HDT at 1.8 MPa, Density, Tensile strain, Water Absorption, Thermal Conductivity and Shrinkage which are typical data. The MVR of this material at 337 degrees C/6.7 kgf will have a specification between 3 and 7.5 (MFR: 4.2-10.5)

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break, 5 mm/min	120	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3	%	ISO 527
Tensile Modulus, 1 mm/min	8000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	180	MPa	ISO 178
Flexural Modulus, 2 mm/min	6500	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
Thermal Conductivity	0.3	W/m-°C	ISO 8302
CTE, 23°C to 150°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	6.E-05	1/°C	ISO 11359-2
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	205	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	200	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.2 - 0.4	%	SABIC Method
Melt Flow Rate, 337°C/6.6 kgf	7.5	g/10 min	ASTM D 1238
Density	1.53	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.9	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.5	%	ISO 62

Source GMD, last updated:2009/06/17

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	150	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	370 - 410	°C
Nozzle Temperature	360 - 410	°C
Front - Zone 3 Temperature	370 - 420	°C
Middle - Zone 2 Temperature	360 - 410	°C
Rear - Zone 1 Temperature	350 - 400	°C
Hopper Temperature	80 - 120	°C
Mold Temperature	140 - 180	°C

Source GMD, last updated:2009/06/17

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.