ULTEM™ RESIN AUR200G6

REGION EUROPE

DESCRIPTION

AUR200G6 is a 30 percent glass filled ULTEM Utility grade. The grade will have a limited color availabilty, dark gray to black. 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)

TYPICAL PROPERTY VALUES

Revision 20190717

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
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			
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL			
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
Relative Temp Index, Elec [1]	105	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	105	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	105	°C	UL 746B
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	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
ELECTRICAL			
Hot-Wire Ignition (HWI), PLC 1	≥3	mm	UL 746A
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-101772829	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	150	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	370 – 410	°C	
Nozzle Temperature	360 – 410	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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