ULTEM™ RESIN SF2250

REGION ASIA

DESCRIPTION

High flow ULTEM for thin wall application

TYPICAL PROPERTY VALUES

Revision 20190828

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	162	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D 638
Tensile Modulus, 5 mm/min	8900	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	197	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	7260	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	157	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3	%	ISO 527
Flexural Modulus, 2 mm/min	7150	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	89	J/m	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	9	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	203	°C	ASTM D 648
CTE, -40°C to 150°C, flow	1.4E-05	1/°C	ASTM E 831
CTE, -40°C to 150°C, xflow	5.4E-05	1/°C	ASTM E 831
CTE, 23°C to 150°C, flow	1.8E-05	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	5.9E-05	1/°C	ISO 11359-2
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	208	°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			
Specific Gravity	1.44	-	ASTM D 792
Moisture absorption (23°C/50%)	0.07	%	-
Mold Shrinkage, flow	0.46	%	SABIC method
Mold Shrinkage, xflow	0.54	%	SABIC method
Melt Flow Rate, 337°C/6.6 kgf	19.7	g/10 min	ASTM D 1238
Density	1.44	g/cm³	ISO 1183
Water Absorption, 23°C/24hrs	0.2	%	ISO 62-1
Melt Volume Rate, MVR at 345°C/10.0 kg	40	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E207780-100116343	-	-
UL Recognized, 94V-0 Flame Class Rating [1]	1.5	mm	UL 94
INJECTION MOLDING			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	150	°C	
Drying Time	4 – 6	hrs	
Drying Time (Cumulative)	24	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	350 – 400	°C	
Nozzle Temperature	345 – 400	°C	
Front - Zone 3 Temperature	345 – 400	°C	
Middle - Zone 2 Temperature	340 – 400	°C	
Rear - Zone 1 Temperature	330 – 400	°C	
Mold Temperature	135 – 165	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 – 0.076	mm	

(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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