ULTEM™ RESIN SF2360

REGION ASIA

DESCRIPTION

30% Glass fiber filled, super high flow for thin wall application.

INDUSTRY	SUB INDUSTRY
Automotive	Heavy Truck, Automotive Under the Hood, Aerospace, Motorcycle, Recreational/Specialty Vehicles
Building and Construction	Building Component
Consumer	Personal Accessory, Home Appliances, Commercial Appliance, Furniture
Electrical and Electronics	Energy Management, Drone Solutions, Mobile Phone - Computer - Tablets, Circuit Boards/Additives, Lighting, Printer Copier, Speaker - Earphone, Wireless Communication
Hygiene and Healthcare	Personal and Professional Hygiene
Industrial	Electrical, Material Handling, Textile, Eyewear
Mass Transportation	Rail
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20231213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	148	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D638
Tensile Modulus, 5 mm/min	11950	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	212	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	9940	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	152	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Flexural Modulus, 2 mm/min	9940	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	89	J/m	ASTM D256
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 D648
CTE, -40°C to 150°C, flow	1.5E-05	1/°C	ASTM E831
CTE, -40°C to 150°C, xflow	5.4E-05	1/°C	ASTM E831
CTE, 23°C to 150°C, flow	1.3E-05	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	6.2E-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	1.53	-	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture absorption (23°C/50% RH)	0.04	%	-
Mold Shrinkage, flow	0.39	%	SABIC method
Mold Shrinkage, xflow	0.47	%	SABIC method
Melt Flow Rate, 337°C/6.6 kgf	18	g/10 min	ASTM D1238
Density	1.53	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.1	%	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	E207780-100116345	-	-
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
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.

DISCLAIMER