

# ULTEM™ RESIN 1100F

REGION ASIA

## DESCRIPTION

Standard flow Polyetherimide (Tg 217C). ECO Conforming. US FDA and EU Food Contact compliant. UL94 V0, V2 and 5VA listing. Effective June 2007, this grade will no longer be supported with biocompatibility information and should not be used for medical applications which require biocompatibility. Alternative grade HU1100.

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	110	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	70	%	ASTM D638
Tensile Modulus, 5 mm/min	3720	MPa	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	165	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	3720	MPa	ASTM D790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	37	J/m	ASTM D256
Izod Impact, Reverse Notched, 3.2 mm	1548	J/m	ASTM D256
Gardner, 23°C	21	J	ASTM D3029
<b>THERMAL</b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	198	°C	ASTM D648
Relative Temp Index, Elec <sup>(1)</sup>	170	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(1)</sup>	170	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(1)</sup>	170	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.36	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 337°C/6.6 kgf	8.8	g/10 min	ASTM D1238
<b>ELECTRICAL</b>			
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D495
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 1	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 2	≥0.75	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 3	≥3	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 4	≥0.75	mm	UL 746A
<b>FLAME CHARACTERISTICS <sup>(1)</sup></b>			
UL Yellow Card Link	<a href="#">E121562-101048254</a>	-	-
UL Recognized, 94-5VA Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	≥0.75	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥0.4	mm	UL 94
<b>INJECTION MOLDING</b>			
Drying Temperature	150	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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.

## ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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