

Revision 20180905

ULTEM™ RESIN 1110F

REGION ASIA

DESCRIPTION

Enhanced flow Polyetherimide (Tg 217C). ECO Conforming. US FDA and EU Food Contact compliant, NSF 51 listing. UL94 V0 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 HU1110.

TYPICAL PROPERTY VALUES

NECHANICALTensile Stress, Mi, Type I, Smm/min101MPaATM 0 638Tensile Stress, Mig Nipe I, Smm/min720MPaATM 0 638Tensile Moduks, Smm/min720MPaATM 0 638Flexaral Stress, Mid, 2, Smm/min, 100 mm span165MPaATM 0 790Breural Moduks, 2, Smm/min, 100 mm span1920MPaATM 0 790Breural Moduks, 2, Smm/min, 100 mm span1922MMMTM 0 700Cardner, 23°CJMIDSTM 0 700MIDCardner, 23°CJMIDSTM 0 700MIDPDT, 142 Mig, 5.4 mm, unameled192MIDMID 0 64Relative Temp Index, Mech w/impact190°CMID 0 64Relative Temp Index, Mech w/impact190°CMID 0 64Relative Temp Index, Mech w/impact106°CMID 0 64Mid Mindage, flow, 3.2 mm0.5 -0.7%10MID 0 70Mid Mindage, flow, 4.2 mm106%10MID 0 70Mid Mindage, flow, 4.2 mm10.6%10MID 0 70Mid Mindage, flow, 4.3 mm10.6%10MID 0 70Mid Mindage, flow, 4.3 mm10.6%10MID 0 70Mid Mindage, flow, 4.3 mm10.6%10MID 0 70Mid Mindage, flow, 4.410.6%10MID 0 70Mid Mindage, flow, 4.4<	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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Hearal Modulas 2.6 mm/min, 100 mm span3720MPaASTM D 790IMPACTJJASTM D 790Lad Impact, Reverse Notched, 3.2 mm1922J/mASTM D 256Gardner, 23°CJJASTM D 309THERNALJJJASTM D 484THERNALTJJJRelative Temp Index, Alech un, unamealed190°CMID 648Relative Temp Index, Mech w/impact170°CMID 648Relative Temp Index, Mech w/impact170°CU. 7468Specific Gravity136·CASTM D 792Mod Shrinkage, flow, 3.2 mm0.5 - 0.7% ASM D 792SABC methodMot Relative Temp Index, Mach w/ impact16910 mmASTM D 792Mot Relative Temp Index, Mach w/ impact1.5 - 0.7% ASM D 792MID 792Mot Shrinkage, flow, 3.2 mm0.5 - 0.7% ASM D 792MID 792Mot Relative Temp Index, Mach w/ impact1.6 - 0.7% ASM D 792MID 792Mot Relative Temp Index, Mach w/ impact1.6 - 0.7% ASM D 792MID 792Mot Shrinkage, flow, 3.2 mm0.5 - 0.7% ASM D 792MID 792Hot Wite Ingitine (PLC)1.6 - 0.7% ASM D 792MID 792Hot Wite Ingitine (PLC)1.6 - 0.7% ASM D 792MID 792Hot Wite Ingitine (PLC)1.7 - 0.7% ASM D 792MID 792Link Coogned, 94/Or Ham Class Rating0.7 - 0.7% ASM D 792MID 792Link Coogned, 94/Or Ham Class Rating0.7 - 0.7% ASM D 792 <th>Tensile Modulus, 5 mm/min</th> <th>3720</th> <th>MPa</th> <th>ASTM D 638</th>	Tensile Modulus, 5 mm/min	3720	MPa	ASTM D 638
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Relative True function of the model of th	Relative Temp Index, Elec	170	°C	UL 746B
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Comparative Tracking Index (UL) {PLC}4PLC CodeUL 746AFLAME CHARACTERISTICSVVUL Recognized, 94V-0 Flame Class Rating0.75mmUL 94UL Recognized, 94-5VA Rating3mmUL 94INIECTION MOLDINGVVDrying Temperature150°CVDrying Time (Cumulative)24hrsVMaximum Moisture Content0.02%VMet Temperature350-400°CV	High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
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UL Recognized, 94-5VA Rating3mmUL 94INIECTION MOLDING*********************************	FLAME CHARACTERISTICS			
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Drying Time4 - 6hrsDrying Time (Cumulative)24hrsMaximum Moisture Content0.02%Melt Temperature350 - 400°C	INJECTION MOLDING			
Drying Time (Cumulative)24hrsMaximum Moisture Content0.02%Melt Temperature350 - 400°C	Drying Temperature	150	°C	
Maximum Moisture Content 0.02 % Melt Temperature 350 – 400 °C	Drying Time	4 – 6	hrs	
Melt Temperature 350 – 400 °C	Drying Time (Cumulative)	24	hrs	
	Maximum Moisture Content	0.02	%	
Nozzle Temperature 345 – 400 °C	Melt Temperature	350 - 400	°C	
	Nozzle Temperature	345 - 400	°C	

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CHEMISTRY THAT MATTERS



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	

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