

ULTEM™ RESIN AR9100

REGION ASIA

DESCRIPTION

10% Glass fiber filled, standard flow Polyetherimide (Tg 217C). Meets FAR 25.853 and OSU 65/65 with low toxicity, smoke, and flame evolution. ECO Conforming.

INDUSTRY	SUB INDUSTRY	
Automotive	Aerospace	
Mass Transportation	Rail	

TYPICAL PROPERTY VALUES

Revision 20231109

MECHANICAL Tensile Stress, jrd. Type I, 5 mm/min 110 MPa ASTM D638 Tensile Stress, jrd. Type I, 5 mm/min 119 MPa ASTM D638 Tensile Modulus, 5 mm/min 4340 MPa ASTM D638 Flexural Stress, jrd, 2.6 mm/min, 100 mm span 193 MPa ASTM D790 Flexural Modulus, 2.6 mm/min, 100 mm span 193 MPa ASTM D790 IMPACT Impact, notched, 23°C 69 J/m ASTM D256 Izod Impact, Reverse Notched, 3.2 mm 480 J/m ASTM D256 THERMAL THERMAL THERMAL THERMAL HDT, 1.82 MPa, 6.4 mm, unannealed 207 °C ASTM D648 PHYSICAL TS ASTM D792 Mold Shrinkage, flow, 3.2 mm 50.5 0.6 g 20 ASTM D792 Molet Flow Rate, 337°C/c los fig 5.0 0. g 20 ASTM D1238 FAR Flammability, FAR 25.853 A/B NATURAL ASTM D1238 ASTM D1238 OSU total heat release (2 minute test) 5 KW-min/m² FAR 25.853 Vertical Burn a (60s) pa	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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INJECTION MOLDING Drying Temperature 150 °C	NBS Smoke Density, Flaming, Ds 1.5 min	0	-	ASTM E662
Drying Temperature 150 °C	NBS Smoke Density, Flaming, Ds 4 min	5	-	ASTM E662
7 3 2 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	INJECTION MOLDING			
Drying Time 4 – 6 Hrs	Drying Temperature	150	°C	
	Drying Time	4 – 6	Hrs	
Drying Time (Cumulative) 24 Hrs	Drying Time (Cumulative)	24	Hrs	
Maximum Moisture Content0.02%	Maximum Moisture Content	0.02	%	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	365 – 390	°C	
Nozzle Temperature	360 – 380	°C	
Front - Zone 3 Temperature	365 – 390	°C	
Middle - Zone 2 Temperature	355 – 375	°C	
Rear - Zone 1 Temperature	345 – 365	°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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