

ULTEM™ RESIN AR9100

REGION AMERICAS

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, yld, Type I, 5 mm/min 110 MPa ASTM D638 Tensile Stress, brk, Type I, 5 mm/min 119 MPa ASTM D638 Tensile Strain, brk, Type I, 5 mm/min 8 % ASTM D638 Tensile Modulus, 5 mm/min 4340 MPa ASTM D638 Flexural Modulus, 2.6 mm/min, 100 mm span 193 MPa ASTM D790 IExural Modulus, 2.6 mm/min, 100 mm span 5030 MPa ASTM D790 IMPACT Lizod Impact, notched, 23°C 69 J/m ASTM D256 Izod Impact, Reverse Notched, 3.2 mm 480 J/m ASTM D256 THERMAL HOT, 1.82 MPa, 6.4 mm, unannealed 207 °C ASTM D648 PHYSICAL Specific Gravity 1.32 - ASTM D792 Mold Shrinkage, flow, 3.2 mm 0.5 – 0.6 % SABIC method Melt Flow Rate, 337°C/6.6 kgf 6.9 g/10 min ASTM D1238 FLAME CHARACTERISTICS FARA Flammability, FAR 25.853 A/B NATURAL - FAR 25.853 OSU peak heat release rat	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	NBS Smoke Density, Flaming, Dmax	5	-	ASTM E662
NBS Smoke Density, Flaming, Ds 4 min 5 - ASTM E662	NBS Smoke Density, Flaming, Ds 1.5 min	0	-	ASTM E662
	NBS Smoke Density, Flaming, Ds 4 min	5	-	ASTM E662
INJECTION MOLDING	INJECTION MOLDING			
Drying Temperature 150 °C	Drying Temperature	150	°C	
Drying Time 4 – 6 Hrs	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	

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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