

# ULTEM™ RESIN AUT195

REGION AMERICAS

## DESCRIPTION

High flow Polyetherimide blend for automotive lighting applications where highly metallized, reflective surfaces are required. Haze onset temperature of 195C (SABIC test method).

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	96	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	70	%	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	145	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	3170	MPa	ASTM D790
Tensile Modulus, 1 mm/min	3000	MPa	ISO 527
Flexural Modulus, 2 mm/min	3100	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	2082	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Izod Impact, Reverse Notched, 3.2 mm	2136	J/m	ASTM D256
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	5	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	4	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	4	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	190	°C	ASTM D648
Thermal Conductivity	0.23	W/m·°C	ISO 8302
CTE, 23°C to 150°C, flow	6.E-05	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	6.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	205	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	195	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	180	°C	ISO 75/Ae
Metallized Haze Onset	195	°C	SABIC method
<b>PHYSICAL</b>			
Specific Gravity	1.26	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Mold Shrinkage on Tensile Bar, xflow	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 337°C/6.6 kgf	24	g/10 min	ASTM D1238
Density	1.27	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/saturated)	0.9	%	ISO 62-1

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.5	%	ISO 62
Melt Volume Rate, MVR at 340°C/5.0 kg	16	cm <sup>3</sup> /10 min	ISO 1133
<b>INJECTION MOLDING</b>			
Drying Temperature	130 – 140	°C	
Drying Time	3 – 4	Hrs	
Melt Temperature	340 – 380	°C	
Nozzle Temperature	340 – 360	°C	
Front - Zone 3 Temperature	340 – 360	°C	
Middle - Zone 2 Temperature	330 – 350	°C	
Rear - Zone 1 Temperature	320 – 340	°C	
Hopper Temperature	80 – 100	°C	
Mold Temperature	125 – 140	°C	

## 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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