

Technical Information

ALTUGLAS™ HFI-7 Frosted 18

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.18 g/cm ³	1.18 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	5.3 g/10 min	5.3 g/10 min	ISO 1133
Molding Shrinkage - Flow	2.0E-3 to 6.0E-3 in/in	0.20 to 0.60 %	ASTM D955
Water Absorption			ISO 62
Equilibrium, 73°F (23°C), 50% RH	0.32 %	0.32 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			ISO 527-2/50
Yield, 73°F (23°C)	7250 psi	50.0 MPa	
Break, 73°F (23°C)	7250 psi	50.0 MPa	
Tensile Strain			ISO 527-2/50
Yield, 73°F (23°C)	5.0 %	5.0 %	
Break, 73°F (23°C)	20 %	20 %	
Flexural Modulus (73°F (23°C))	334000 psi	2300 MPa	ISO 178
Flexural Stress (73°F (23°C))	11600 psi	80.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	1.3 ft-lb/in ²	2.7 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	15 ft-lb/in ²	32 kJ/m ²	
Notched Izod Impact Strength (73°F (23°C))	1.4 ft-lb/in ²	3.0 kJ/m ²	ISO 180/1A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (M-Scale)	76	76	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi (1.8 MPa), Annealed	178 °F	81.0 °C	
Vicat Softening Temperature	> 205 °F	> 96.0 °C	ISO 306/B50
CLTE - Flow (-22 to 73°F (-30 to 23°C))	5.6E-5 in/in/°F	1.0E-4 cm/cm/°C	ASTM D696
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating	HB	HB	UL 94
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Refractive Index ¹	1.490	1.490	ISO 489
Light Transmittance (78.74 mil (2000 µm))	88.0 %	88.0 %	ASTM D1003
Haze	100 %	100 %	ASTM D1003
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	176 °F	80 °C	
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr	
Rear Temperature	428 to 464 °F	220 to 240 °C	
Middle Temperature	446 to 482 °F	230 to 250 °C	
Front Temperature	464 to 500 °F	240 to 260 °C	
Nozzle Temperature	464 to 500 °F	240 to 260 °C	
Processing (Melt) Temp	464 to 500 °F	240 to 260 °C	
Mold Temperature	140 to 158 °F	60 to 70 °C	

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Method B

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