

Altuglas® HFI-7 Frosted 18

Polymethyl Methacrylate Acrylic

Altuglas International of Arkema Inc.

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific	• Europe
Appearance	• Frost	
Forms	• Granules	
Physical	Nominal Value Unit	Test Method
Density	1.18 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	5.5 g/10 min	ISO 1133
Molding Shrinkage - Flow	0.20 to 0.60 %	ASTM D955
Water Absorption (Equilibrium, 23°C, 50% RH)	0.32 %	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Stress (Yield, 23°C)	50.0 MPa	ISO 527-2
Tensile Strain (Break, 23°C)	20 %	ISO 527-2
Flexural Modulus (23°C)	2300 MPa	ISO 178
Flexural Strength (23°C)	80.0 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	2.7 kJ/m ²	ISO 179/2C
Charpy Unnotched Impact Strength (23°C)	32 kJ/m ²	ISO 179/2U
Notched Izod Impact Strength (23°C)	3.0 kJ/m ²	ISO 180/1A
Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature 1.8 MPa, Unannealed	81.0 °C	ISO 75-2/A
Vicat Softening Temperature	97.0 °C	ISO 306/B
CLTE - Flow (-30 to 23°C)	0.000080 cm/cm/°C	ASTM D696
Flammability	Nominal Value Unit	Test Method
Flame Rating - UL	HB	UL 94
Optical	Nominal Value Unit	Test Method
Refractive Index ²	1.490	ISO 489
Transmittance	88.0 %	ASTM D1003
Haze	100 %	ASTM D1003
Injection	Nominal Value Unit	
Drying Temperature	75.0 to 80.0 °C	
Drying Time	2.0 to 4.0 hr	
Processing (Melt) Temp	215 to 235 °C	
Mold Temperature	60.0 to 70.0 °C	

Notes

¹ Typical properties: these are not to be construed as specifications.

² Method B