

Altuglas® VS

Polymethyl Methacrylate Acrylic

Altuglas International of Arkema Inc.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	
Forms	• Granules		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1)	• Viscosity vs. Shear Rate (ISO 11403-2)
Physical		Nominal Value Unit	Test Method
Density		1.18 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)		24 g/10 min	ISO 1133
Molding Shrinkage - Flow		0.20 to 0.60 %	ASTM D955
Water Absorption (Equilibrium, 23°C, 50% RH)		0.30 %	ISO 62
Mechanical		Nominal Value Unit	Test Method
Tensile Stress (Yield)		66.0 MPa	ISO 527-2
Tensile Strain (Break)		5.0 %	ISO 527-2
Flexural Modulus		2900 MPa	ISO 178
Flexural Strength		97.0 MPa	ISO 178
Impact		Nominal Value Unit	Test Method
Charpy Notched Impact Strength		2.0 kJ/m²	ISO 179/2C
Charpy Unnotched Impact Strength		11 kJ/m²	ISO 179/2U
Notched Izod Impact Strength		1.8 kJ/m²	ISO 180/1A
Hardness		Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)		84	ASTM D785
Thermal		Nominal Value Unit	Test Method
Heat Deflection Temperature 1.8 MPa, Unannealed		76.0 °C	ISO 75-2/A
Vicat Softening Temperature		85.0 °C	ISO 306/B
CLTE - Flow		0.000070 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		92.0 %	ASTM D1003
Haze		0.45 %	ASTM D1003
Injection		Nominal Value Unit	
Drying Temperature		70.0 to 75.0 °C	
Drying Time		2.0 to 4.0 hr	
Processing (Melt) Temp		190 to 210 °C	
Mold Temperature		50.0 to 60.0 °C	

Notes

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

² Method B