

Altuglas® V 045 I

Polymethyl Methacrylate Acrylic
Altuglas International of Arkema Inc.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	
Additive	• Antiblock	• Lubricant	
Features	• Antiblocking	• Good UV Resistance	
	• Good Impact Resistance	• Lubricated	
Appearance	• Clear/Transparent		
Forms	• Granules		
Processing Method	• Blow Molding	• Injection Molding	• Sheet Extrusion
	• Extrusion	• Profile Extrusion	• Thermoforming

Physical	Nominal Value Unit	Test Method
Density	1180 kg/m³	ISO 1183 ²
Melt volume-flow rate (230°C/3.8 kg)	1.90 cm³/10min	ISO 1133 ²
Water Absorption		ISO 62 ²
Saturation	2.0 %	
Equilibrium	0.30 %	

Mechanical	Nominal Value Unit	Test Method
Tensile modulus	3000 MPa	ISO 527-2 ²
Tensile Stress (Break)	65.0 MPa	ISO 527-2 ²
Tensile Strain (Break)	10 %	ISO 527-2 ²
Tensile Creep Modulus		ISO 899-1 ²
1 hr	2600 MPa	
1000 hr	1700 MPa	

Impact	Nominal Value Unit	Test Method
Charpy notched impact strength (23°C)	3.00 kJ/m²	ISO 179/1eA ²
Charpy impact strength (23°C)	25.0 kJ/m²	ISO 179/1eU ²

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ISO 75-2 ²
0.45 MPa	94.0 °C	
1.8 MPa	92.0 °C	
Vicat Softening Temperature		ISO 306 ²
50°C/h, B (50N)	101 °C	
CLTE - Flow	0.000070 cm/cm/°C	ISO 11359-2 ²

Electrical	Nominal Value Unit	Test Method
Surface resistivity	1.0E+14 ohm	IEC 60093 ²
Volume resistivity	1.0E+13 ohm·m	IEC 60093 ²
Relative Permittivity		IEC 60250 ²
100 Hz	4.00	
1 MHz	3.00	
Dissipation Factor		IEC 60250 ²
100 Hz	0.050	
1 MHz	0.040	
Comparative tracking index	600	IEC 60112 ²
Electric strength	19 kV/mm	IEC 60243-1 ²

Flammability	Nominal Value Unit	Test Method
Burning Behav. at 1.6mm nom. thickn.		ISO 1210 ²
1.60 mm	HB	

Notes

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

² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.