Altuglas® HFI-10

PMMA — Altuglas International

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**3**	g/10min	ISO 1133
Temperature	**230**	°C	-
Load	**3.8**	kg	-
Spec. heat capacity of melt	**2090**	J/(kg K)	-
ASTM Data			
Mold Shrinkage, MD	**0.005**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Strength	**38**	MPa	ISO 527
Strain at break	**30**	%	ISO 527
Flexural modulus, 23°C	**1700**	MPa	ISO 178
Charpy impact strength, +23°C	**40**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**4**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**5**	kJ/m²	ISO 180/1A
ASTM Data			
Rockwell Hardness	**M 38**	-	ASTM D 785

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**81**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**85**	°C	ISO 75-1/-2
Vicat softening temperature, B	**90**	°C	ISO 306
ASTM Data			
UL 94 Flame rating	**HB**	-	UL 94
Coefficient of Thermal Expansion, MD	**100**	E-6/K	ASTM D 696

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	**15**	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	**0.04**	-	ASTM D 150
Dielectric Constant, 60 Hz	**3.9**	-	ASTM D 150
Surface Resistivity	**1E14**	Ohm	ASTM D 257
Volume Resistivity	**>1E15**	Ohm*cm	ASTM D 257

Optical properties	Value	Unit	Test Standard
ASTM Data			
Haze	**2**	%	ASTM D 1003
Light Transmittance	**90**	%	ASTM D 1003

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.36**	%	Sim. to ISO 62
Density	**1150**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Melt temperature	**230 - 240**	°C	-
Mold temperature	**75 - 85**	°C	-

Characteristics

Processing
Injection Molding

Special Characteristics
High impact or impact modified, Transparent

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa