ACRYPET IR D50 001

PMMA — Mitsubishi Chemical Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**2.4**	g/10min	ISO 1133
Temperature	**230**	°C	-
Load	**3.8**	kg	-
Molding shrinkage, parallel	**0.6**	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**1800**	MPa	ISO 527
Tensile Strength	**49**	MPa	ISO 527
Flexural modulus, 23°C	**1900**	MPa	ISO 178
Charpy impact strength, +23°C	**55**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**2.6**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**4.1**	kJ/m²	ISO 180/1A
Rockwell hardness	**M 52**	-	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**84**	°C	ISO 75-1/-2
Vicat softening temperature, B	**85**	°C	ISO 306
ASTM Data			
Coefficient of Thermal Expansion, MD	**100**	E-6/K	ASTM D 696
Thermal Conductivity, solid state	**0.0288**	W/(m K)	ASTM C 177

Optical properties	Value	Unit	Test Standard
ISO Data			
Haze	**0.6**	-	ISO 14782
Luminous transmittance	**92**	%	ISO 13468-1, -2
ASTM Data			
Index of Refraction	**1.49**	-	ASTM D 542

Other properties	Value	Unit	Test Standard
Water absorption	**0.3**	%	Sim. to ISO 62
Density	**1160**	kg/m³	ISO 1183

Characteristics

Special Characteristics	Regional Availability
U.V. stabilized or stable to weather	Asia Pacific