

Chi Mei® PA-797

Chemical resistance and high impact resistance. Applications: Kitchen and home appliances.

POLYLAC® ABS resin is a copolymer primarily composed of styrene (SM), acrylonitrile (AN), and butadiene (BD). ABS has very good mechanical properties, dimensional stability, processing ability, chemical resistance, and a high-quality appearance.

Information provided by Chi Mei Corporation

Physical Properties	Metric	English	Comments
Density	1.05 g/cc	0.0379 lb/in ³	ISO 1183
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ISO 294-4
Melt Flow	9.2 g/10 min @Load 10.0 kg, Temperature 220 °C	9.2 g/10 min @Load 22.0 lb, Temperature 428 °F	Melt Volume Rate (ml/10 min.); ISO 1133
Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	33.0 MPa	4790 psi	50mm/min; ISO 527
Tensile Strength, Yield	43.0 MPa	6240 psi	50 mm/min; ISO 527
Elongation at Break	40 %	40 %	50mm/min; ISO 527
Flexural Strength	51.0 MPa	7400 psi	2mm/min; ISO 178
Flexural Modulus	1.10 GPa	160 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	35.0 kJ/m ²	16.7 ft-lb/in ²	ISO 180/1A
Charpy Impact, Notched	3.55 J/cm ²	16.9 ft-lb/in ²	ISO 179
Thermal Properties	Metric	English	Comments
CTE, linear	88.0 µm/m-°C	48.9 µin/in-°F	ISO 11359
Deflection Temperature at 1.8 MPa (264 psi)	80.0 °C	176 °F	Unannealed; ISO 75/A
	99.0 °C	210 °F	Annealed; ISO 75/A
Vicat Softening Point	95.0 °C @Load 5.00 kg	203 °F @Load 11.0 lb	50°C/hr; ISO 306
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	