POLYLAC PA-709P

ABS — CHIMEI Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**5**	cm³/10min	ISO 1133
Temperature	**220**	°C	-
Load	**10**	kg	-
Molding shrinkage, parallel	**0.6**	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	**0.5**	g/10min	ASTM D 1238
Temperature	**200**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Yield stress	**42**	MPa	ISO 527
Stress at break	**31**	MPa	ISO 527
Flexural modulus, 23°C	**2000**	MPa	ISO 178
Flexural strength	**61**	MPa	ISO 178
Charpy notched impact strength, +23°C	**39**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**39**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Strength at Yield	**45**	MPa	ASTM D 638
Flexural Modulus	**2068**	MPa	ASTM D 790
Flexural Strength	**63.4**	MPa	ASTM D 790
Rockwell Hardness	**R 100**	-	ASTM D 785
Izod Impact notched, 1/4 in	**363**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**98**[ann.]	°C	ISO 75-1/-2
Vicat softening temperature, A	**106**	°C	ISO 306
Vicat softening temperature, B	**101**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**87**	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Yellow Card available	**yes**	-	-
ASTM Data			
UL 94 Flame rating	**HB**	-	UL 94
Thickness tested	**1.5**	mm	-
DTUL @ 264 psi	**87.8**	°C	ASTM D 648
Vicat Temperature	**104**	°C	ASTM D 1525

ann.: annealed

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Arc Resistance	**90**	s	ASTM D 495

Other properties	Value	Unit	Test Standard
Density	**1030**	kg/m³	ISO 1183
Density	**1040**	kg/m³	ASTM D 792

Processing Recommendation Extrusion	Value	Unit	Test Standard
Type of extrusion	**pipe/tube**	-	-
Pre-drying - Temperature	**80 - 85**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Feed temperature	**190 - 210**	°C	-
Zone 1	**210 - 240**	°C	-
Nozzle temperature	**220 - 250**	°C	-

Characteristics

Processing
Pipe/Tube Extrusion

Delivery form
Pellets

Regional Availability
Asia Pacific