

ChiMei

ABS

PA-709P

Product information				
Manufacturer		ChiMei Corporation		
Material Shape		Pellets		
Process		Extrusion molding		
FR		HB		
Material Attribute		Extrusion grade		
Features		Low flowHigh toughnessHigh impact		
Application		Construction ApplicationsPipeIndustrial helmetsCompound Base ResinRodsSheetHeels		
Flammability	Condition	Standard	Value	Unit
Flame	Rating All Color 1.5mm	UL94	HB	
Flame	Rating All Color 3.0mm	UL94	HB	
Hardness	Condition	Standard	Value	Unit
Rockwell	Hardness R(Scale)	ASTM D785	100	
Mechanical behavior	Condition	Standard	Value	Unit
Charpy	Notch Impact 23°C	ISO 179	39	kJ/m ²
Elongation	6mm/min	ASTM D638	50	%
Elongation	50mm/min	ISO 527	30	%
Flexural	Strength 2.8mm/min	ASTM D790	650	kg/cm ²
Flexural	Strength 2.0mm/min	ISO 178	61	MPa
Flexural	Modulus 2.8mm/min	ASTM D790	21000	kg/cm ²
Flexural	Modulus 2.0mm/min	ISO 178	2	GPa
Izod	Notch Impact 23°C 6.4mm	ASTM D256	37.5	kg-cm/cm
Izod	Notch Impact 23°C	ISO 180	39	kJ/m ²
Tensile	Strength Yield 6mm/min	ASTM D638	460	kg/cm ²
Tensile	Strength Yield 50mm/min	ISO 527	42	MPa
Tensile	Strength Break 50mm/min	ISO 527	31	MPa
Physical property	Condition	Standard	Value	Unit
Density	23°C	ASTM D792	1.04	g/cm ³
Density	23°C	ISO 1183	1.04	g/cm ³
Melt	Index 200°C 5kg	ASTM D1238	0.5	g/10min
Melt	Index 220°C 10kg	ISO 1133	5	cm ³ /10min
Shrinkage		ISO 294	0.4~0.7	%
Thermal	Condition	Standard	Value	Unit
CLE		ISO 11359	8.7E-5	cm/cm/°C
HDT	Annealed 1.8MPa	ASTM D648	98	°C
HDT	Unannealed 1.8MPa	ASTM D648	88	°C
HDT	Annealed 1.8MPa	ISO 75	98	°C

Vicat	Softening Temperature 50°C/hr 10N	ASTM D1525	104	°C
Vicat	Softening Temperature 50°C/hr 10N	ISO 306	106	°C
Vicat	Softening Temperature 50°C/hr 50N	ISO 306	101	°C
UL	Condition	Standard	Value	Unit
Arc	Resistance	ASTM D495	6	PLC
Comparative	Tracking Index	IEC 60112	0	PLC
HAI	ALL 1.5mm	UL 746A	0	PLC
HAI	ALL 3.0mm	UL 746A	0	PLC
HVTR		UL 746A	1	PLC
HWI	ALL 1.5mm	UL 746A	3	PLC
HWI	ALL 3.0mm	UL 746A	3	PLC
RTI	Elec ALL 1.5mm	UL 746B	60	°C
RTI	Elec ALL 3.0mm	UL 746B	60	°C
RTI	Imp ALL 1.5mm	UL 746B	60	°C
RTI	Imp ALL 3.0mm	UL 746B	60	°C
RTI	Str ALL 1.5mm	UL 746B	60	°C
RTI	Str ALL 3.0mm	UL 746B	60	°C
UL	FlameRating ALL 1.5mm	UL94	HB	
UL	FlameRating ALL 3.0mm	UL94	HB	