

WONDERLOY PC-540A

(PC+ABS)

CHIMEI Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	20	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.005	mm/mm	ASTM D 955
Mechanical properties			
ISO Data			
Yield stress	60	MPa	ISO 527
Stress at break	55	MPa	ISO 527
Flexural modulus, 23°C	2400	MPa	ISO 178
Flexural strength	90	MPa	ISO 178
Charpy notched impact strength, +23°C	45	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	45	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Strength at Yield	58.9	MPa	ASTM D 638
Tensile Strength at Break	54	MPa	ASTM D 638
Elongation at Yield	4	%	ASTM D 638
Elongation at Break	100	%	ASTM D 638
Flexural Modulus	2452	MPa	ASTM D 790
Flexural Strength	88.3	MPa	ASTM D 790
Rockwell Hardness	R 119	-	ASTM D 785
Izod Impact notched, 1/8 in	443	J/m	ASTM D 256
Thermal properties			
ISO Data			
Temp. of deflection under load, 1.80 MPa	83	°C	ISO 75-1/-2
Vicat softening temperature, A	108	°C	ISO 306
Vicat softening temperature, B	101	°C	ISO 306
Coeff. of linear therm. expansion, parallel	80	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2.0	mm	-
Yellow Card available	yes	-	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (2)	3	mm	-
Glow Wire Ignition Temperature (GWIT)	800	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1.5	mm	-
Glow Wire Ignition Temperature (GWIT)	750	°C	IEC 60695-2-13
GWIT - thickness tested (2)	3	mm	-
ASTM Data			
UL 94 Flame rating	V-0	-	UL 94
Thickness tested	1.5	mm	-
DTUL @ 264 psi	86.1	°C	ASTM D 648
Vicat Temperature	101	°C	ASTM D 1525
Electrical properties			
ISO Data			

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Relative permittivity, 1MHz	3.1	-	IEC 62631-2-1
Volume resistivity	3.9E15	Ohm*m	IEC 62631-3-1
Surface resistivity	2.9E15	Ohm	IEC 62631-3-2

ASTM Data

Dielectric Strength, Short Time	1.26	kV/mm	ASTM D 149
Arc Resistance	150	s	ASTM D 495

Other properties	Value	Unit	Test Standard
Density	1180	kg/m ³	ISO 1183
Density	1180	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	90	°C	-
Pre-drying - Time	4	h	-
Mold temperature	50 - 100	°C	-
Feed temperature	200 - 220	°C	-
Zone 1	230 - 250	°C	-
Nozzle temperature	220 - 240	°C	-

Characteristics**Processing**

Injection Molding

Additives

Flame retarding agent

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Applications

IT / Business Machine, Electrical and Electronical

Regional Availability

Asia Pacific