



Makrolon® XT5010

Grades / TV frame

MVR (300 °C/1.2 kg) 34 cm³/10 min; easy processing; low viscosity; easy release; Vicat softening temperature 50 N, 50 °C/h = 110 °C; injection molding - melt temperature 240 - 280 °C; available in transparent colors only; LCD tv frame

ISO Shortname

PC

Property	Test Condition	Unit	Standard	typical Value
Rheological properties				
C Melt volume-flow rate	300 °C/ 1.2 kg	cm³/10 min	ISO 1133	34
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2700
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	75
C Yield strain	50 mm/min	%	ISO 527-1,-2	5.0
C Nominal strain at break	50 mm/min	%	ISO 527-1,-2	> 50
Stress at break	50 mm/min	MPa	ISO 527-1,-2	60
Strain at break	50 mm/min	%	b.o. ISO 527-1,-2	90
C Charpy impact strength	23 °C	kJ/m²	ISO 179/1eU	220C
Thermal properties				
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	112
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	114
C Burning behavior UL 94 [UL recognition]	0.75-3.0 mm	Class	UL 94	V-2
Relative temperature index (Tensile strength) [UL recognition]	1.5 mm	°C	UL 746B	80
Relative temperature index (Tensile impact strength) [UL recognition]	1.5 mm	°C	UL 746B	80
Relative temperature index (Electric strength) [UL recognition]	1.5 mm	°C	UL 746B	80
Glow wire test (GWFI) [UL recognition]	0.75 mm	°C	IEC 60695-2-12	960
Glow wire test (GWFI) [UL recognition]	1.5 mm	°C	IEC 60695-2-12	960
Glow wire test (GWFI) [UL recognition]	3.0 mm	°C	IEC 60695-2-12	960
Glow wire test (GWIT) [UL recognition]	0.75 mm	°C	IEC 60695-2-13	800
Glow wire test (GWIT) [UL recognition]	1.5 mm	°C	IEC 60695-2-13	825
Glow wire test (GWIT) [UL recognition]	3.0 mm	°C	IEC 60695-2-13	850
Other properties (23 °C)				
C Density		kg/m³	ISO 1183-1	1210
Processing conditions for test specimens				
C Injection molding - Melt temperature		°C	ISO 294	260
C Injection molding - Mold temperature		°C	ISO 294	80
C Injection molding - Injection velocity		mm/s	ISO 294	200

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

Impact properties: N = non-break, P = partial break, C = complete break

