Makrolon® TC110

PC-T30 — Covestro Deutschland AG

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	9	cm³/10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6500	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	3	%	ISO 527
Nominal strain at break	3	%	ISO 527
Stress at Break	50	MPa	ISO 527
Impact Strength (Charpy), +23°C	70	kJ/m²	ISO 179/1eU
Puncture - maximum force, +23°C	2900	N	ISO 6603-2
Puncture energy, +23°C	15	J	ISO 6603-2
Flexural Modulus (23°C)	6500	MPa	ISO 178
Flexural strength	100	MPa	ISO 178
Ball Indentation Hardness	123	MPa	ISO 2039-1

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, 50°C/h 50N	145	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	35	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	54	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	1.0	mm	-
Glow Wire (GWFI, Flammability Index)	875	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1.5	mm	-
Glow Wire Ignition Temperature)	850	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1.5	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Volume Resistivity	1E16	Ohm*m	IEC 62631-3-1
Surface Resistivity	1E16	Ohm	IEC 62631-3-2
Electric Strength	40	kV/mm	IEC 60243-1

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1450	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Melt temperature	300	°C	-
Mold temperature	90	°C	-

Characteristics

Processing
Injection Molding

Features
Thermally Conductivity

Delivery form
White

Applications
Electrical and Electronical

Disclaimer