



Makrolon® TC110 FR

PC-(T+MD)30

Covestro Deutschland AG

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	5	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	6000	MPa	ISO 527
Yield stress	52	MPa	ISO 527
Yield strain	3	%	ISO 527
Nominal strain at break	4.3	%	ISO 527
Strain at Break	52	%	ISO 527
Impact Strength (Charpy), +23°C	90	kJ/m²	ISO 179/1eU
Puncture - maximum force, +23°C	3200	N	ISO 6603-2
Puncture energy, +23°C	10	J	ISO 6603-2
Flexural Modulus (23°C)	6000	MPa	ISO 178
Flexural strength	97	MPa	ISO 178

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	132	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	143	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	145	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	36	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	54	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0	class	UL 94
Thickness tested	1.5	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Volume Resistivity	1E15	Ohm*m	IEC 62631-3-1
Surface Resistivity	1E15	Ohm	IEC 62631-3-2
Electric Strength	39	kV/mm	IEC 60243-1
Comparative tracking index	275	-	IEC 60112

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	280	°C	-
Mold temperature	90	°C	-

Characteristics

Processing

Injection Molding

Features

Thermally Conductivity

Special Characteristics

Flame retardant