



Makroblend® SR60

Preliminary Datasheet /

(PC+PBT)-blend, mineral filled, excellent chemical resistance, improved scratch resistance, injection molding grade.

ISO Shortname

PC+PBT-I-QD5

Property	Test Condition	Unit	Standard	typical Value
Rheological properties				
C Melt volume-flow rate	260 °C/ 5 kg	cm³/10 min	ISO 1133	22
C Molding shrinkage, normal	60x60x2 mm/ 260 °C / MT 80 °C/ 500 bar	%	ISO 294-4	0.99
C Molding shrinkage, normal	60x60x2 mm/ 260 °C / MT 80 °C/ 500 bar	%	ISO 294-4	0.99
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2300
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	56
C Yield strain	50 mm/min	%	ISO 527-1,-2	4.4
Stress at break	50 mm/min	MPa	ISO 527-1,-2	43
Flexural modulus	2 mm/min	MPa	ISO 178	2240
Flexural strength	2 mm/min	MPa	ISO 178	83
C Charpy impact strength	23 °C	kJ/m²	ISO 179/1eU	N
C Charpy impact strength	-30 °C	kJ/m²	ISO 179/1eU	N
C Puncture impact properties - maximum force	23 °C	N	ISO 6603-2	3850
C Puncture impact properties - maximum force	-30 °C	N	ISO 6603-2	5040
C Puncture energy	23 °C	J	ISO 6603-2	41
C Puncture energy	-30 °C	J	ISO 6603-2	45
Izod impact strength	23 °C	kJ/m²	ISO 180/1C	N
Izod impact strength	-30 °C	kJ/m²	ISO 180/1C	N
Izod notched impact strength	23 °C	kJ/m²	ISO 180/A	39
Izod notched impact strength	-30 °C	kJ/m²	ISO 180/A	16
Thermal properties				
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	81
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	106
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	122
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	124
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1
C Coefficient of linear thermal expansion, normal	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1
C Burning behavior UL 94	0.85 mm	Class	UL 94	HB (Covestro Test)
Thermal conductivity, through-plane	23 °C; 50 % r. h.	W/(m·K)	ISO 8302	0.22
Electrical properties (23 °C/50 % r. h.)				
C Volume resistivity		Ohm·m	IEC 60093	1E14
C Surface resistivity		Ohm	IEC 60093	1E15
C Electrical strength	1 mm	kV/mm	IEC 60243-1	34
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	175
Other properties (23 °C)				
C Water absorption (saturation value)	Water at 23 °C	%	ISO 62	0.5
C Water absorption (equilibrium value)	23 °C; 50 % r. h.	%	ISO 62	0.2
C Density		kg/m³	ISO 1183-1	1235
Processing conditions for test specimens				
C Injection molding - Melt temperature		°C	ISO 294	270
C Injection molding - Mold temperature		°C	ISO 294	70
C Injection molding - Injection velocity		mm/s	ISO 294	200





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Property	Test Condition	Unit	Standard	typical Value
Recommended processing and drying conditions				
Melt temperatures		°C	-	250-270
Standard Melt temperature		°C	-	260
Barrel Temperatures - Rear		°C	-	230-240
Barrel Temperatures - Middle		°C	-	240-250
Barrel Temperatures - Front		°C	-	250-260
Barrel Temperatures - Nozzle		°C	-	260-270
Mold Temperatures		°C	-	60-80
Hold Pressure (% of injection pressure)		%	-	50-75
Plastic Back Pressure (specific)		bar	-	50-100
Peripheral Screw Speed		m/s	-	0.1-0.2
Shot-to-Cylinder Size		%	-	30-70
Dry Air Drying Temperature		°C	-	105
Dry Air Drying Time		h	-	2-4
Moisture Content max. (%)		%	-	<00.02
Vent Depth		mm	-	0.025-0.075

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

