



Makrolon® Ai2617

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MVR (300 °C/1.2 kg) 12 cm³/10 min; medium viscosity; easy release; UV stabilized; injection molding - melt temperature 280 - 320 °C; available in clear transparent colors; Automotive interior; developed for high-gloss surfaces with highest requirements

ISO Shortname

PC

Property	Test Condition	Unit	Standard	typical Value
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Rheological properties

C Melt volume-flow rate	300 °C/ 1.2 kg	cm ³ /10 min	ISO 1133	12
C Molding shrinkage, parallel	60x60x2 mm/ 500 bar	%	ISO 294-4	0.7
C Molding shrinkage, normal	60x60x2 mm/ 500 bar	%	ISO 294-4	0.7

Mechanical properties (23 °C/50 % r. h.)

C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2400
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	65
C Yield strain	50 mm/min	%	ISO 527-1,-2	6.0
C Nominal strain at break	50 mm/min	%	ISO 527-1,-2	> 50
Stress at break	50 mm/min	MPa	ISO 527-1,-2	65
Strain at break	50 mm/min	%	b.o. ISO 527-1,-2	120
Flexural modulus	2 mm/min	MPa	ISO 178	2350
Flexural strength	2 mm/min	MPa	ISO 178	98
Flexural strain at flexural strength	2 mm/min	%	ISO 178	7
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178	74
C Charpy impact strength	23 °C	kJ/m ²	ISO 179/1eU	N
Izod notched impact strength	23 °C/ 3 mm	kJ/m ²	ISO 21305/based on ISO 180/A	65P
Izod notched impact strength	-30 °C/ 3 mm	kJ/m ²	ISO 21305/based on ISO 180/A	15C
C Puncture impact properties - maximum force	23 °C	N	ISO 6603-2	5400
C Puncture impact properties - maximum force	-30 °C	N	ISO 6603-2	6300
C Puncture energy	23 °C	J	ISO 6603-2	60
C Puncture energy	-30 °C	J	ISO 6603-2	65
Ball indentation hardness		N/mm ²	ISO 2039-1	115

Thermal properties

C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	123
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	136
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	143
C Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	145

Processing conditions for test specimens

C Injection molding - Melt temperature		°C	ISO 294	280
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

