



Lustran ABS M305

grade for smart cards, good dimensional accuracy, excellent dynamic loading capacity

ISO Shortname: ISO 2580-1 -ABS 0, MG, 095-15-16-20

Property	Test Condition	Unit	Standard	Value
Rheological properties				
C Molding shrinkage, normal	60x60x2	%	ISO 294-4	0.5 - 0.8
C Melt volume-flow rate	220 °C; 10 kg	cm ³ /(10 min)	ISO 1133	12
C Molding shrinkage, parallel	60x60x2	%	ISO 294-4	0.5 - 0.8
Mechanical properties (23 °C/50 % r. h.)				
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	45
Tensile Strain at break	50 mm/min	%	acc. ISO 527-1,-2	> 15
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2300
Flexural strength	2 mm/min	MPa	ISO 178	68
Flexural modulus	2 mm/min	MPa	ISO 178	2300
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	21
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	11
C Yield strain	50 mm/min	%	ISO 527-1,-2	2.5
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	150
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	110
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	21
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	11
Ball indentation hardness		N/mm ²	ISO 2039-1	95
Thermal properties				
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	94
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	98
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	99
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.9
Burning rate (US-FMVSS)	2.0 mm	mm/min	ISO 3795	50
Glow wire test (GWI)	2.0 mm	°C	IEC 60695-2-12	700
Electrical properties (23 °C/50 % r. h.)				
C Relative permittivity	100 Hz	-	IEC 60250	3.1
C Relative permittivity	1 MHz	-	IEC 60250	2.9
C Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	50
C Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	80
C Volume resistivity		Ohm·m	IEC 60093	1E13
C Surface resistivity		Ohm	IEC 60093	1E15
C Electric strength	1 mm	kV/mm	IEC 60243-1	34
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	600
Processing conditions for test specimens				
C Injection molding-Melt temperature		°C	ISO 294	240
C Injection molding-Mold temperature		°C	ISO 294	70
C Injection molding-Injection velocity		mm/s	ISO 294	240