

Lustran Ultra 4000 PG

Electroplating grade with high heat resistance

ISO Shortname: ISO 2580-1 -ABS 0, MG, 105-08-09-25

Property	Test Condition	Unit	Standard	Value
Rheological properties				
C Melt volume-flow rate	220 °C; 10 kg	cm ³ /(10 min)	ISO 1133	6
Molding shrinkage, parallel	150x105x3	%	acc. ISO 2577	0,5-0,8
Molding shrinkage, normal	150x105x3	%	acc. ISO 2577	0,5-0,8
Mechanical properties (23 °C/50 % r. h.)				
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	46
Tensile Strain at break	50 mm/min	%	acc. ISO 527-1,-2	>15
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2400
Flexural strength	2 mm/min	MPa	ISO 178	73
Flexural modulus	2 mm/min	MPa	ISO 178	2350
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	23
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	10
C Yield strain	50 mm/min	%	ISO 527-1,-2	3,1
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	20
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	10
Ball indentation hardness		N/mm ²	ISO 2039-1	100
Thermal properties				
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	98
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	103
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	107
C Burning behavior UL 94 (1.6 mm)	1.6 mm	Class	UL 94	HB
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0,9
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0,9
Electrical properties (23 °C/50 % r. h.)				
C Relative permittivity	100 Hz	-	IEC 60250	3,0
C Relative permittivity	1 MHz	-	IEC 60250	2,9
C Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	63
C Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	87
C Volume resistivity		Ohm·m	IEC 60093	1E+14
C Surface resistivity		Ohm	IEC 60093	1E+16
C Electric strength	1 mm	kV/mm	IEC 60243-1	38
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	600
Other properties (23 °C)				
Density		g/cm ³	ISO 1183	1,05
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