XANTAR™ LDS 3760

PC FR(40) Mitsubishi Engineering-Plastics Corporation

Product Texts

Laser Direct Structuring (LDS) *, Flame Retardant (Halogen free), High Flow, Black color only

ISO 1043 PC FR(40)

XANTAR Polycarbonate & Blends, your global partner for innovative added value

**The compound is intended specifically for the use in the process of manufacturing conducting path designs according to the German application of the patent 101 32 092 of LPKF Laser & Electronics AG (Osteriede 7 30827 Garbsen Germany). Please address straight to LPKF Laser & Electronics AG (www.LPKF.de).*

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**28**	cm³/10min	ISO 1133
Temperature	**260**	°C	-
Load	**5**	kg	-
[C] Molding shrinkage, parallel	**0.5**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2500**	MPa	ISO 527
[C] Yield stress	**60**	MPa	ISO 527
[C] Yield strain	**5**	%	ISO 527
[C] Nominal strain at break	**>50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**50**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**20**	kJ/m²	ISO 179/1eA
[C] Puncture energy, +23°C	**40**	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**103**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**105**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**111**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**60**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**60**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**V-1**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Yellow Card available	**yes**	-	-
[C] Burning Behav. at thickness h	**V-1**	class	IEC 60695-11-10
Thickness tested	**0.6**	mm	-
Yellow Card available	**yes**	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.35**	%	Sim. to ISO 62
[C] Humidity absorption	**0.15**	%	Sim. to ISO 62
[C] Density	**1260**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**280**	°C	ISO 294
Injection Molding, mold temperature	**90**	°C	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**100 - 120**	°C	-
Pre-drying - Time	**4 - 6**	h	-
Processing humidity	**≤0.03**	%	-
Melt temperature	**270 - 300**	°C	-
Mold temperature	**80 - 120**	°C	-
Zone 1	**260 - 280**	°C	-
Zone 2	**270 - 290**	°C	-
Zone 3	**270 - 300**	°C	-
Nozzle temperature	**270 - 290**	°C	-

Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant

Delivery form
Pellets

Regional Availability
Europe, Asia Pacific

Additives
Release agent

Other text information

Injection molding
Injection Molding Recommendations

Preliminary recommendations for 3D printing