

Product Texts

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

ISO 1043 PC FR

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*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	10	cm ³ /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	2200	MPa	ISO 527
^[C] Yield stress	52	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/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	55	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	30	kJ/m ²	ISO 179/1eA
^[C] Puncture energy, +23°C	35	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	122	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	144	°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	65	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	3.0	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] Density	1260	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	300	°C	ISO 294
Injection Molding, mold temperature	100	°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, Platable

Delivery form

Pellets

Regional Availability

Europe, Asia Pacific

Additives

Release agent

Other text information

Injection molding

[Injection Molding Recommendations](#)

[Preliminary recommendations for 3D printing](#)