

TECHNICAL DATA SHEET

XANTAR™ LDS 3730

Mitsubishi EP
PC FR

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant, Platable

Product Text

Product Information

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

ISO 1043 PC FR

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	Standard
Melt volume-flow rate, MVR	10	cm ³ /10min	ISO 1133
Temperature	260	°C	
Load	5	kg	
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2200	MPa	ISO 527
Yield stress	52	MPa	ISO 527
Yield strain	5	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	55	kJ/m ²	ISO 179/1eA

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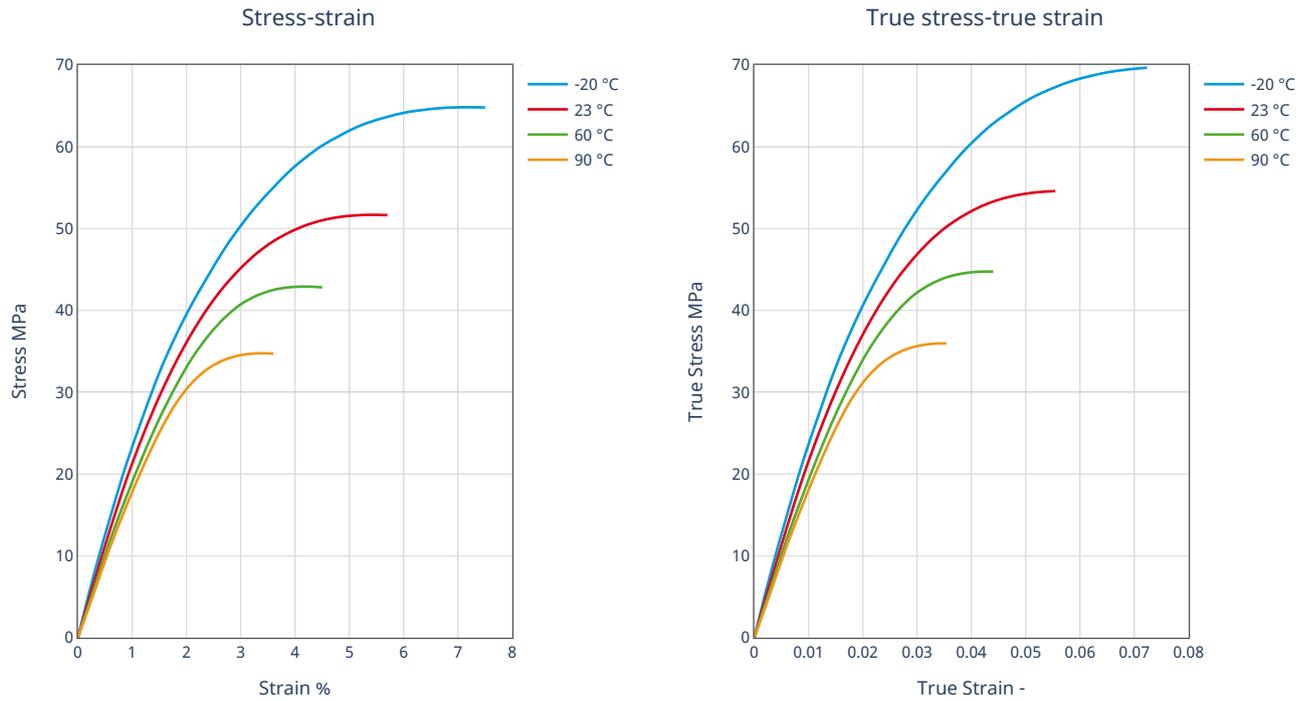
Mechanical Properties	Value	Unit	Standard
Charpy notched impact strength, -30°C	30	kJ/m ²	ISO 179/1eA
Puncture energy, +23°C	35	J	ISO 6603-2
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	122	°C	ISO 75-1/-2
Vicat softening temperature, B	144	°C	ISO 306
Coeff. of linear therm. expansion, parallel	60	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	65	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.5	mm	
Yellow card available	yes		
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	3	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Other Properties	Value	Unit	Standard
Water absorption	0.35	%	Sim. to ISO 62
Density	1260	kg/m ³	ISO 1183
Test Specimen Production	Value	Unit	Standard
Injection molding, melt temperature	300	°C	ISO 294
Injection molding, mold temperature	100	°C	ISO 294
Processing Recommendation Injection Molding	Value	Unit	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	

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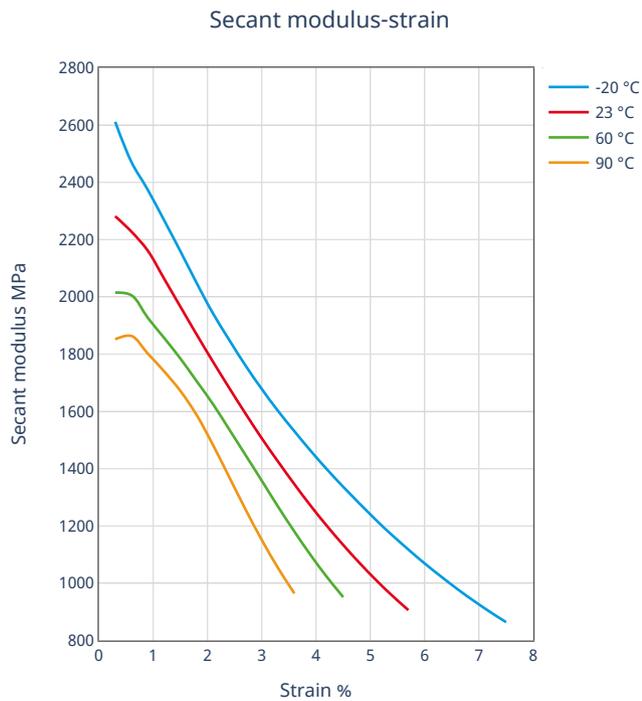
Processing Recommendation Injection Molding	Value	Unit	Standard
Zone 1	260 - 280	°C	
Zone 2	270 - 290	°C	
Zone 3	270 - 300	°C	
Nozzle temperature	270 - 290	°C	

Diagrams



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Injection Molding Recommendations

Preliminary recommendations for 3D printing