

**TECHNICAL DATA SHEET**

# XANTAR™ LDS 3760

Mitsubishi EP  
PC FR(40)

**Processing**

Injection molding

**Delivery Form**

Pellets

**Additives**

Release agent

**Special Characteristics**

Flame retardant

## Product Text

**Product Information**

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](http://www.LPKF.de)).*

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	28	cm <sup>3</sup> /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	2500	MPa	ISO 527
Yield stress	60	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 <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	50	kJ/m <sup>2</sup>	ISO 179/1eA

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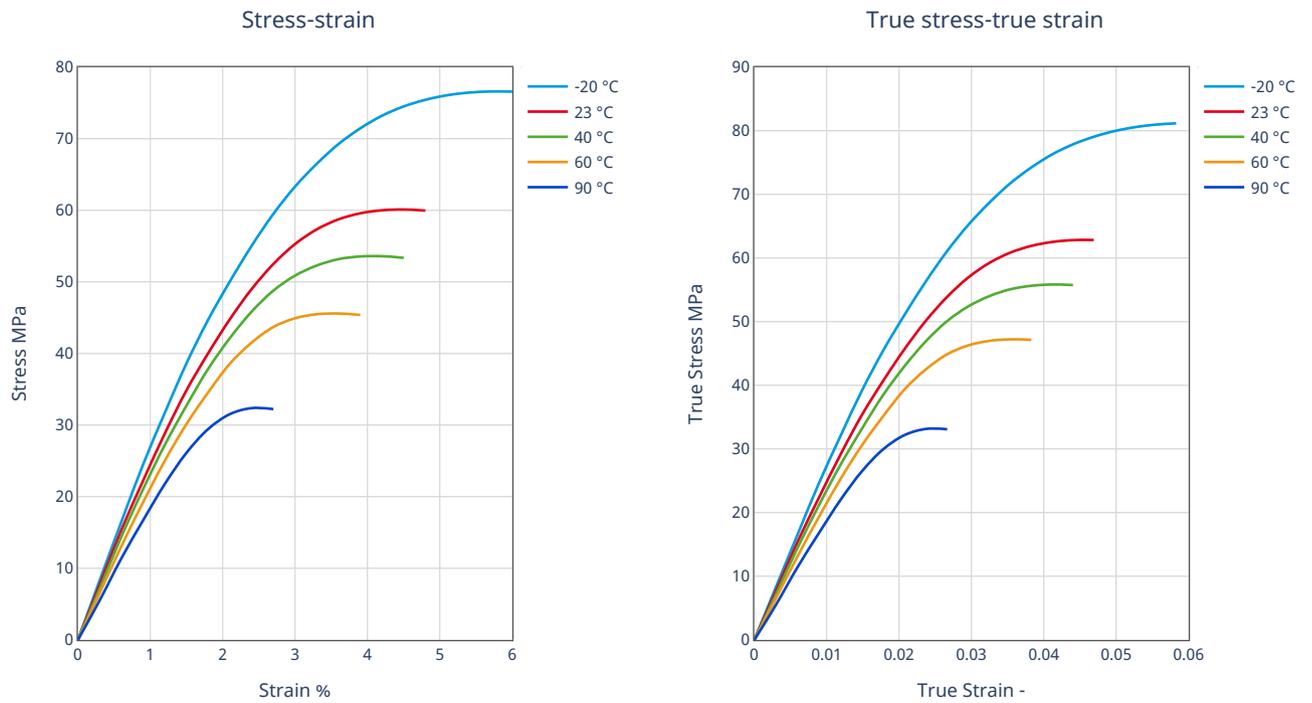
Mechanical Properties	Value	Unit	Standard
Charpy notched impact strength, -30°C	20	kJ/m <sup>2</sup>	ISO 179/1eA
Puncture energy, +23°C	40	J	ISO 6603-2
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	103	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	105	°C	ISO 75-1/-2
Vicat softening temperature, B	111	°C	ISO 306
Coeff. of linear therm. expansion, parallel	60	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	60	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-1	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	0.6	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
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1260	kg/m <sup>3</sup>	ISO 1183
Test Specimen Production	Value	Unit	Standard
Injection molding, melt temperature	280	°C	ISO 294
Injection molding, mold temperature	90	°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	
Zone 1	260 - 280	°C	

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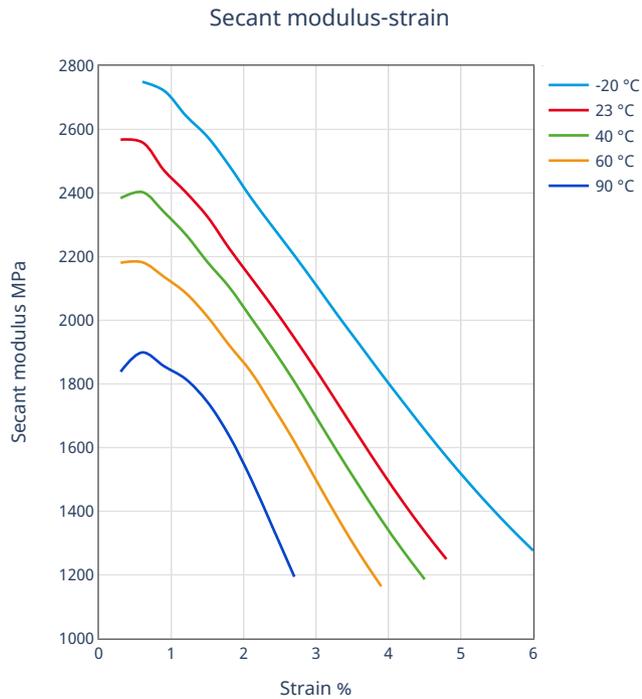
Processing Recommendation Injection Molding	Value	Unit	Standard
Zone 2	270 - 290	°C	
Zone 3	270 - 300	°C	
Nozzle temperature	270 - 290	°C	

## Diagrams



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Injection Molding Recommendations

Preliminary recommendations for 3D printing