



Mitsubishi Engineering-Plastics Corp.

XANTAR™ LDS 3730

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information

Product Description

LDS (Laser Direct Structuring), Flame retardant (Non Br & Non P), Black color only

General

Additive	• Flame Retardant	
Features	• Bromine Free • Flame Retardant	• Laser Markable • Low (to None) Phosphorus Content
Uses	• Cell Phones	• Laser Direct Structuring
Appearance	• Black	
Processing Method	• 3D Printing, Laser Sintering/Melting	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.26	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	8.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	8.0	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.40 to 0.60	%	
Flow	0.40 to 0.60	%	
Water Absorption (Saturation, 23°C)	0.35	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2200	MPa	ISO 527-1/1
Tensile Stress (Yield)	52.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	5.0	%	
Break	> 50	%	
Flexural Modulus ²	2300	MPa	ISO 178
Flexural Stress ²	80.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	30	kJ/m ²	
23°C	55	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength			ISO 180/4A
-20°C	40	kJ/m ²	
23°C	60	kJ/m ²	
Multi-Axial Instrumented Impact Energy (23°C)	35.0	J	ISO 6603-2



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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	122	°C	ISO 75-2/A
Vicat Softening Temperature	144	°C	ISO 306
CLTE			ISO 11359-2
Flow	6.0E-5	cm/cm/°C	
Transverse	6.5E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Dielectric Constant (1 MHz)	3.00		IEC 60250
Dissipation Factor (1 MHz)	5.0E-3		IEC 60250
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.50 mm	HB		
1.5 mm	V-0		
3.0 mm	5VB		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	100 to 120	°C
Drying Time - Hot Air Dryer	4.0 to 6.0	hr
Rear Temperature	270 to 300	°C
Middle Temperature	270 to 300	°C
Front Temperature	270 to 300	°C
Nozzle Temperature	270 to 300	°C
Mold Temperature	80 to 120	°C

