

LUCEL N109LDS

Injection Molding, POM

Description

Chemical Resistance

Application

Copyer, Watch, Clock, VCR, Printer Parts, etc.

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.41
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	1.8 ~ 2.1
Melt Flow Rate	190 °C/2.16kg	ASTM D1238	g/10min	13
Mechanical				
Tensile Strength, 3.2mm @ Yield	10mm/min	ASTM D638	kg/cm ²	625
Tensile Elongation, 3.2mm @ Break	10mm/min	ASTM D638	%	60
Flexural Strength, 6.4mm	2.8mm/min	ASTM D790	kg/cm ²	920
Flexural Modulus, 6.4mm	2.8mm/min	ASTM D790	kg/cm ²	26,000
IZOD Impact Strength, 6.4mm (Notched)	23 °C	ASTM D256	kg·cm/cm	6.5
Rockwell Hardness	R-Scale	ASTM D785	-	82
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg 4.6kg	ASTM D648	°C	110 160
Flammability		UL94		
0.8mm			class	
1.6mm			class	
2.5mm			class	
3.2mm			class	
Electrical				
Dissipation Factor	1MHz	ASTM D150	-	3.8
Surface Resistivity		ASTM D257	Ohm	1*10 ¹⁸
Volume Resistivity	23 °C	ASTM D257	Ohm·cm	1*10 ¹⁴
Dielectric Strength, 1mm	23 °C	ASTM D149	kV/mm	24

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molded specimens and after 48 hours storage at 23°, 50% relative humidity.

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