



Optix® CA-924 G

Plaskolite, Inc. - Polymethyl Methacrylate Acrylic

Sunday, November 3, 2019

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Electrically Insulating • Good Weather Resistance • Radiation Sterilizable • Good Impact Resistance • Machinable
Uses	• Medical/Healthcare Applications
Appearance	• Clear/Transparent
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.17		ASTM D792
Melt Mass-Flow Rate (230°C/3.8 kg)	6.3	g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	472000	psi	ASTM D638
Tensile Strength (Yield)	8470	psi	ASTM D638
Tensile Elongation (Yield)	4.5	%	ASTM D638
Flexural Modulus	370000	psi	ASTM D790
Flexural Strength (Yield)	12500	psi	ASTM D790
Compressive Strength	12000	psi	ASTM D695
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	0.80	ft-lb/in	ASTM D256
Gardner Impact	14.0	in-lb	ASTM D3029
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	68		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	182	°F	ASTM D648
Vicat Softening Temperature	233	°F	ASTM D1525
RTI Elec (0.06 in)	122	°F	UL 746
RTI Imp (0.06 in)	122	°F	UL 746
RTI Str (0.06 in)	122	°F	UL 746
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength	380	V/mil	ASTM D149
Dielectric Constant			ASTM D150
1 kHz	3.14		
1 MHz	2.44		
Dissipation Factor			ASTM D150
1 kHz	0.041		
1 MHz	0.030		

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Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94
Optical	Nominal Value	Unit	Test Method
Refractive Index	1.490		ASTM D542
Transmittance	91.6	%	ASTM D1003

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	350 to 450	°F
Middle Temperature	380 to 480	°F
Front Temperature	400 to 500	°F
Nozzle Temperature	380 to 480	°F
Processing (Melt) Temp	420 to 480	°F
Mold Temperature	110 to 190	°F
Injection Pressure	10000 to 20000	psi
Back Pressure	50.0 to 150	psi
Screw Speed	50 to 100	rpm
Clamp Tonnage	10	tons/in ²

Notes

¹ Typical properties: these are not to be construed as specifications.