Optix® CA-927 G

Polymethyl Methacrylate Acrylic

Plaskolite West, Inc.

Message:

Optix® CA-927 G is a Polymethyl Methacrylate Acrylic product. It can be processed by injection molding and is available in North America. Typical application: Medical/Healthcare.
Characteristics include:
Flame Rated
Good Toughness
Good Weather Resistance
High Gloss
Impact Resistant

General Information			
Features	Electrically Insulating		
	Good Impact Resistance		
	Good Toughness		
	Good Weather Resistance		
	High Gloss		
	Machinable		
	Radiation Sterilizable		
Uses	Medical/Healthcare Applications		
Appearance	Clear/Transparent		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.16	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	4.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.20 to 0.70	%	ASTM D955
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	55		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2000	MPa	ASTM D638
Tensile Strength (Yield)	50.2	MPa	ASTM D638
Tensile Elongation (Yield)	5.3	%	ASTM D638
Flexural Modulus	2140	MPa	ASTM D790
Flexural Strength (Yield)	75.8	MPa	ASTM D790
Compressive Strength	72.4	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	53	J/m	ASTM D256
Gardner Impact	3.28	J	ASTM D3029

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	78.9	°C	ASTM D648
Vicat Softening Temperature	112	°C	ASTM D1525
RTI Elec (1.50 mm)	50.0	°C	UL 746
RTI Imp (1.50 mm)	50.0	°C	UL 746
RTI Str (1.50 mm)	50.0	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength	15	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
1 kHz	3.16		
1 MHz	2.52		
Dissipation Factor			ASTM D150
1 kHz	0.040		
1 MHz	0.032		
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.50 mm)	HB		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.490		ASTM D542
Transmittance	91.3	%	ASTM D1003
Injection	**Nominal Value**	**Unit**	
Drying Temperature	79.4	°C	
Drying Time	2.0 to 4.0	hr	
Rear Temperature	182 to 238	°C	
Middle Temperature	199 to 254	°C	
Front Temperature	210 to 266	°C	
Nozzle Temperature	199 to 254	°C	
Processing (Melt) Temp	221 to 254	°C	
Mold Temperature	37.8 to 82.2	°C	
Injection Pressure	68.9 to 138	MPa	
Back Pressure	0.345 to 1.03	MPa	
Screw Speed	50 to 100	rpm	
Clamp Tonnage	14	kN/cm^2	

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China