

OPTIX CA-1000 IG CLEAR

OPTIX CA-1000 IG is the highest impact-resistant acrylic polymer designed for injection molding. It is suitable for gamma-ray or ethylene oxide sterilization for medical applications and food contact uses.

CODE COMPLIANCES

OPTIX CA-1000 IG complies with FDA regulation 21 CFR 177.1010 (acrylic and modified acrylic plastics, semi-rigid and rigid) for food contact uses. OPTIX CA-1000 IG also complies with USP Class VI biocompatibility specification for use in medical applications.

APPLICATIONS

Products in contact with food, optical lenses and other parts for medical devices

TYPICAL PROPERTIES*

Property	Test Method	Units	Values
OPTICAL			
Luminous Transmittance	ASTM D1003	%	91.0
Haze	ASTM D1003	%	< 3.0
Refractive Index	ASTM D542	-	1.49
RHEOLOGICAL			
Melt Flow Rate (230°C/3.8kg)	ASTM D1238	g/10 min	1.6
MECHANICAL			
Tensile Strength	ASTM D638	psi (MPa)	5,800 (40)
Tensile Elongation	ASTM D638	%	20
Tensile Modulus of Elasticity	ASTM D638	psi (MPa)	200,000 (1,400)
Flexural Strength	ASTM D790	psi (MPa)	9,000 (62)
Flexural Modulus	ASTM D790	psi (MPa)	230,000 (1,600)
Impact Strength - Notched Izod (1/4")	ASTM D256	ft-lbf/in. (J/m)	1.1 (59)
Impact Strength - Falling Dart (GB, 1/8")	ASTM D5420	in.-lbf (J)	80 (9.0)
Rockwell Hardness (M Scale)	ASTM D785	-	26
THERMAL			
Vicat Softening Temperature (50N, 50°C/hr)	ASTM D1525	°F (°C)	187 (86)
Heat Deflection Temperature Under Load (264 psi)	ASTM D648	°F (°C)	180 (82)
Coefficient of Linear Thermal Expansion	ASTM D696	cm/(cm·°C)	12 × 10 ⁻⁵
Mold Shrinkage	ASTM D955	%	0.2 - 0.6
OTHER			
Specific Gravity	ASTM D792	-	1.15
Flammability Class	UL 94	-	HB
Water Absorption	ASTM D570	%	0.3
ASTM Classification	ASTM D788	-	0231V1

* Typical Properties are not intended for specification purposes

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.