

# OPTIX CA-86 CLEAR

OPTIX CA-86 is a high molecular weight general-purpose grade acrylic polymer. It is designed for injection molding and extrusion processes. OPTIX CA-86 offers the highest heat resistance, scratch resistance, chemical resistance, and stiffness.

## APPLICATIONS

Sheets, profiles, automotive taillight lenses, optical lenses, and sanitary wares

TYPICAL PROPERTIES*			
Property	Test Method	Units	Values
<b>OPTICAL</b>			
Luminous Transmittance	ASTM D1003	%	92.0
Haze	ASTM D1003	%	< 1.0
Refractive Index	ASTM D542	-	1.49
<b>RHEOLOGICAL</b>			
Melt Flow Rate (230°C/3.8kg)	ASTM D1238	g/10 min	1.6
<b>MECHANICAL</b>			
Tensile Strength	ASTM D638	psi (MPa)	10,500 (72)
Tensile Elongation	ASTM D638	%	5.0
Tensile Modulus of Elasticity	ASTM D638	psi (MPa)	470,000 (3,200)
Flexural Strength	ASTM D790	psi (MPa)	17,000 (117)
Flexural Modulus	ASTM D790	psi (MPa)	450,000 (3,100)
Impact Strength – Notched Izod (1/4")	ASTM D256	ft-lbf/in. (J/m)	0.35 (19)
Impact Strength – Falling Dart (GB, 1/8")	ASTM D5420	in.-lbf (J)	2.0 (0.23)
Rockwell Hardness (M Scale)	ASTM D785	-	96
<b>THERMAL</b>			
Vicat Softening Temperature (50N, 50°C/hr)	ASTM D1525	°F (°C)	227 (108)
Heat Deflection Temperature Under Load (264 psi)	ASTM D648	°F (°C)	207 (97)
Coefficient of Linear Thermal Expansion	ASTM D696	cm/(cm·°C)	6 × 10 <sup>-5</sup>
Mold Shrinkage	ASTM D955	%	0.2 – 0.6
<b>OTHER</b>			
Specific Gravity	ASTM D792	-	1.19
Flammability Class	UL 94	-	HB
Relative Thermal Index	UL 746B	°C	90
Water Absorption	ASTM D570	%	0.3
ASTM Classification	ASTM D788	-	0141V1

\* 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.