

Optix® CA-1000 E-2

Polymethyl Methacrylate Acrylic

Plaskolite West, Inc.

Product Description

CA-1000 E-2 Clear is a specially designed impactmodified grade polymer designed for extrusion process. The typical applications are films, extruded sheets, capping material for other plastic substrates.

Designed based on the best balance of 2 phases of acrylics i.e. acrylic plastic phases & acrylic elastomeric phase. Design in molecular morphology and refractive index match, Has up to 10 times impact strength of general-purpose acrylic polymers without sacrificing optical and weathering resistance properties. Excellent blend stock material for those applications requiring let-down impact strength.

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Impact Modifier		
Features	• Good Weather Resistance • High Impact Resistance	• Impact Modified • Opticals	
Uses	• Building Materials	• Film	• Sheet
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Film Extrusion	

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.16 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	0.80 g/10 min	ASTM D1238
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1760 MPa	ASTM D638
Tensile Strength (Yield)	44.9 MPa	ASTM D638
Tensile Elongation (Yield)	38 %	ASTM D638
Flexural Strength	61.3 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact	64 J/m	ASTM D256
Gardner Impact ²	6.33 J	ASTM D3029
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	80.0 °C	ASTM D1003
Vicat Softening Temperature	108 °C	ASTM D1525
Flammability	Nominal Value Unit	Test Method
Flame Rating - UL	HB	UL 94
UL	Nominal Value Unit	Test Method
RTI Str	90.0 °C	UL 746
RTI Imp	90.0 °C	UL 746
RTI Elec	90.0 °C	UL 746
Outdoor Suitability	f2	UL 746C
Optical	Nominal Value Unit	Test Method
Transmittance	91.7 %	ASTM D1003

Notes

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

² Geometry GB