



PLASTIC SELECTION GROUP, INC.

YOUR PARTNER IN DEVELOPING MATERIAL ALTERNATIVES

Edge™ 8 Injection Molding

Product Description: *Edge™ Copolymer is a clear thermoplastic resin that combines crystal clarity and rigidity with superior toughness. Edge™ 8 products were designed to compete with the slightly more brittle resins like GPPS, SAN, or General Purpose Acrylic.*

Typical Material Properties

General Properties	Test Method (ASTM)	Typical Values (English)
Specific Gravity	D 792	1.06
Mold Shrinkage	D 955	.003-.006 in/in
Melt Flow (200°C/5 kg.)	D 1238	2.5 g/10 min
Food Contact Acceptable	FDA	21 CFR 11.1640
	FDA	21 CFR 174.5

Mechanical Properties		
Tensile Strength @ Break	D 638	55 MPa (8000 psi)
Elongation	D 790	6%
Flexural Modulus	D 790	3309 MPa (480000 psi)
Flexural Strength @ Yield	D 790	110 MPa (16000 psi)
Rockwell Hardness	D 785	82 Shore D
Dart Drop Impact 0.125 x 2.5" disk		5 in-lbf (0.6 J)

Thermal Properties

Deflection Temp. [@ 0.455 MPa (66psi)]	D 648	210°F (99°C)
Vicat Softening Temp. [@ 1kg load]	D 1525	240°F (116°C)
Flammability Classification [3.2 mm (.125 in.)]	UL 94	90HB

Additional: *Dishwasher safe*

Optical Properties

Haze	D 1003	< 0.5%
Light Transmittance	D 1003	93%

Recommended Processing

Drying Temperature	NO Drying needed
Rear Temperature	360-370°F (182-188°C)
Middle Temperature	370-390°F (188-199°C)
Front Temperature	380-400°F (193-204°C)
Nozzle/Die Head Temperature	380-420°F (193-215°C)
Processing (Melt) Temp	400-430°F (204-221°C)
Mold Temperature	80-100°F (27-38°C)
Back Pressure	50-200 psi (0.34-1.38 MPa)
Screw Speed	40-80 rpm

First purge with GPPS at a high temperature, without degrading the GPPS. As it clears, lower the temperature into the Edge™ molding range of 400-430°F (204-221°C).

The information provided above is based upon typical values. Typical values are intended only as guides. Each customer is responsible for determining whether products and information in this document are appropriate for the customer's use. **NO GUARANTEES OR WARRANTIES ARE EXPRESSED OR IMPLIED.**