

Product Data Sheet
Kostrate® Edge 8
Injection Molding

Product Description: *Kostrate® Edge 8 Copolymer is a clear thermoplastic resin that combines crystal clarity and rigidity with superior toughness. Kostrate® 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 / Cert.	Typical Values
Specific Gravity	ASTM D 792	1.06
Mold Shrinkage	ASTM D 955	.003-.006 in/in
Melt Flow (200°C/5 kg.)	ASTM D 1238	2.2 g/10 min
Food Contact Acceptable	FDA 21 CFR 177.1830 NSF/ANSI 51	Compliant Certified

Mechanical Properties

Tensile Strength @ Yield	ASTM D 638	63 MPa (9200 psi)
Elongation	ASTM D 638	2 %
Tensile Modulus	ASTM D 638	2894 MPa (420000 psi)
Flexural Modulus	ASTM D 790	3309 MPa (480000 psi)
Flexural Strength @ Yield	ASTM D 790	110 MPa (16000 psi)
Hardness	ASTM D 2240	82 Shore D
Izod Impact (1/8" bar @ 73°F)	ASTM D 256	0.6 ft-lbf/in (32 J/m)

Thermal Properties

Deflection Temp. [@ 0.455 MPa (66psi)]	ASTM D 648	200°F (93°C)
Vicat Softening Temp. [@ 1kg load]	ASTM D 1525	220°F (104°C)
Flammability Classification [3.2 mm (.125 in.)]	UL 94	90HB

Additional: *Dishwasher safe*

Optical Properties

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

Recommended Processing

Drying Temperature	NO Drying needed
Rear Temperature	350-450°F (177-232°C)
Middle Temperature	370-450°F (188-232°C)
Front Temperature	370-470°F (188-243°C)
Nozzle/Die Head Temperature	370-470°F (188-243°C)
Processing (Melt) Temp	370-470°F (188-243°C)
Mold Temperature	90-175°F (32-79°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 Kostrate® Edge 8 molding range of 400-480°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.**