

INEOS STYROLUTION

K-RESIN® PRODUCT GUIDE



INEOS
STYROLUTION



Driving Success. Together.

The information provided in this document is for informational purposes only and does not constitute a contract. The information is provided as a service to our customers and is not intended to be used as a basis for any legal action. Entec Polymers, Inc. and its subsidiaries are not responsible for any inaccuracies or omissions in this document. The information is provided "as is" without any warranty, expressed or implied, including fitness for a particular purpose. The customer shall use its own independent skill and expertise in the evaluation of the resin product to determine suitability for a particular application and accepts the results of its use. The information is provided for informational purposes only and does not constitute a contract. The information is provided as a service to our customers and is not intended to be used as a basis for any legal action. Entec Polymers, Inc. and its subsidiaries are not responsible for any inaccuracies or omissions in this document. The information is provided "as is" without any warranty, expressed or implied, including fitness for a particular purpose. The customer shall use its own independent skill and expertise in the evaluation of the resin product to determine suitability for a particular application and accepts the results of its use. The information is provided for informational purposes only and does not constitute a contract. The information is provided as a service to our customers and is not intended to be used as a basis for any legal action. Entec Polymers, Inc. and its subsidiaries are not responsible for any inaccuracies or omissions in this document. The information is provided "as is" without any warranty, expressed or implied, including fitness for a particular purpose. The customer shall use its own independent skill and expertise in the evaluation of the resin product to determine suitability for a particular application and accepts the results of its use.

As a premier clear resin, K-Resin® Styrenic Block Copolymer (SBC) is known for its unique blend of sparkling clarity, impact, toughness, stiffness and exceptional gloss. K-Resin® SBC has been used for over 40 years in a variety of applications ranging from packaging and toys to medical components and displays.

K-Resin® SBS Markets Includes:



Appliances



Office Products



Custom Compounds



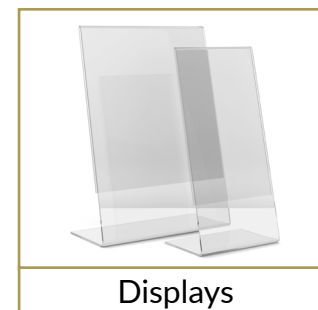
Medical Devices



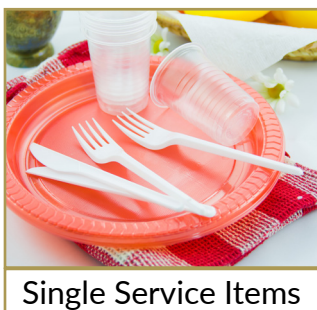
Consumer Goods



Flexible Packaging



Displays



Single Service Items



Rigid Packaging



Garment Hangers



Toys

		K-RESIN® KR01	K-RESIN® KR03	K-RESIN® KR03E	K-RESIN® KR05
Density (g/cm3)	ASTM D792	1.01	1.01	1.01	1.01
Melt Flow Rate at 200°C/5kg (g/10 min.)	ASTM D1238	8	7.5	7.5	7.5
Water Absorption (Equilibrium)	ASTM D570	---	<0.090	0.090	0.090
Tensile Modulus (psi)	ASTM D638	260,000	240,000	240,000	240,000
Tensile Strength at Yield (psi)	ASTM D638	4,900	3,800	3,800	3,800
Tensile Strain at Break (%)	ASTM D638	30	230	230	230
Flexural Modulus (psi)	ASTM D790	261,000	260,000	260,000	260,000
Flexural Strength (psi)	ASTM D790	7,800	5,400	5,400	5,400
Charpy Notched Impact (kJ/m2)	ISO 179/1eA	2	2	---	---
Instrumented Dart Impact (in-lb)	ASTM D3763	19	354	354	354
Shore Hardness (D)	ASTM D2240	69	63	63	63
HDT at 264 psi Annealed, (°F)	ASTM D648	148	144	144	144
Vicat Softening Temp 120°C/Hour 10 N (°F)	ASTM D1525	194	185	185	185
Gloss	ASTM D2457	164	162	162	162
Refractive Index	ISO 489	1.570	1.570	---	---
Light Transmission at 550 mn (%)	ASTM D1003	92	92	92	92
Haze (%)	ASTM D1003	<0.900	<0.900	<0.900	---

INJECTION MOLDING SETTINGS FOR K-RESIN®

Drying Temperature / Time	Not Required
Feed Zone Temperature Range, °F	350 - 380
Middle Zone Temperature Range, °F	360 - 400
Front Zone Temperature Range, °F	400 - 425
Melt Temperature Range, °F	400 - 450
Mold Temperature Range, °F	60 - 130
Injection Pressure Range, psi	7,000 - 20,000
Injection Speed	Slow to Fast
Mold Shrinkage range, in/in	0.002 - 0.010

SHEET EXTRUSION STARTING SETTINGS FOR K-RESIN®

Drying Temperature / Time	Not Required
Feed Zone Temperature, °F	350
Middle Zone Temperature, °F	380
Front Zone Temperature, °F	390
Die Temperature, °F	400
Melt Temperature Range, °F	390 - 425
Roll Temperature, °F	160
Blow Pressure Range, psi	40 - 100

BLOW MOLDING SETTINGS FOR K-RESIN®

Drying Temperature / Time	Not required
Feed Zone Temperature Range, °F	290 - 320
Middle Zone Temperature Range, °F	330 - 350
Front Zone Temperature Range, °F	330 - 360
Head Temperature Range, °F	340 - 370
Melt Temperature Range, °F	360 - 390
Mold Temperature Range, °F	40 - 80
Blow Pressure Range, psi	40 - 100
Mold Shrinkage range, in/in	0.002 - 0.010

