

K-RESIN[®] PORTFOLIO

Styrene butadiene copolymer with unique blend of sparkling clarity and impact toughness



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STYROLUTION

Driving Success. Together.

K-RESIN®

As a premier clear resin, K-Resin SBC is known for its unique blend of sparkling clarity, impact toughness, stiffness and exceptional gloss. K-Resin SBC is used in various applications ranging from packaging and toys to medical components and displays for more than 40 years.

Discover K-RESIN's sparkling clarity, impact toughness, stiffness and exceptional gloss.

KEY PROPERTIES



KEY APPLICATIONS

- › Medical devices
- › Food packaging
- › Labeling & twist films
- › Shrink films

			PROPERTIES & PROCESSING														MECHANICAL										THERMAL			OPTICAL	
			Polymer abbreviation	Density	Method: injection molding (M); extrusion (E); blow molding (B); blending (X)		Melt Flow Rate (200 °C / 5 kg)	Moisture Absorption	Oxygen Transmission Rate (23 °C / 0% RH)	Water Vapor Transmission Rate (WTR) 23 °C (0% to 85% RH gradient)	Instrumented Dart Impact (total energy)	Tensile Modulus	Tensile Stress at Yield, 23 °C	Tensile Strain at Break, 23 °C	Flexural Strength, 23 °C	Flexural Modulus, 23 °C	Hardness Shore D	Elongation at Break, MD/TD	Elmendorf Tear, MD/TD	Puncture, Energy at Peak Force	Tensile Yield Strength, MD/TD	Secant Modulus, 1%, MD/TD	Dart Drop, 26 in (66 mm)	Vicat Softening Temperature, B/1 (120 °C/h, 10N)	DTUL @ 264 psi - Annealed	Light transmission at 550 nm	Gardner Gloss (mold temperature 100°F)	Haze			
TEST METHOD			ASTM D 792		ASTM D 1238	ASTM D 570	ASTM D 3985	ASTM F1249-06	ASTM D 3763	ASTM D 638	ASTM D 638	ASTM D 638	ASTM D 790	ASTM D 790	ASTM D 2240	ASTM D 882	ASTM D 1922	ASTM D 3763	ASTM D 882	ASTM D 882	ASTM D 1709	ASTM D 1525	ASTM D 648	ASTM D 1003	ASTM D 2457	ASTM D 1003					
UNIT			g/cm ³		g/10 min	%	cc/100in ² /day	g/100in ² /day	in-lbs	psi x 10 ³	psi	%	-	psi x 10 ³	-	-	lbs	in-lb	psi	psi	g	°F	°F	%	%	%					
Grades for injection molding	Excellent clarity Good stiffness Good toughness High surface gloss	Molded containers (integral hinge) Medical devices Toys Displays Compounds	K-RESIN KR01	SBC	1.01	M	8	-	-	19	260	4900	30	7800	261000	69	-	-	-	-	-	194	148	92	164	< 0.9					
			K-RESIN KR03(E)*	SBC	1.01	M	7.5	0.09	-	-	354	240	3800	230	5400	260	63	-	-	-	-	-	-	185	144	92	162	< 0.9			
Grades for extrusion	Excellent clarity Good stiffness Good formability Good toughness High surface gloss	Cups and lids Portion packages Blister packaging Medical trays Profiles Blow molded products	K-RESIN KR05	SBC	1.01	M, E	7.5	0.09	-	-	354	240	3800	230	5400	260	63	-	-	-	-	-	185	144	92	162	-				
			K-RESIN KR40	SBC	1.02	E	10	-	-	-	380	-	2240	339	3535	122800	60	-	-	-	-	-	-	145	117	92	-	< 0.9			
Grades for blown and cast film	Excellent optical properties Good stiffness High surface gloss Good toughness Good heat sealability Enhanced printing characteristics (KR52, KR53)	Shrink sleeve labels Multi-layer films Tamper evident bands ROSO label films Decorated films Twist wrap Medical packaging Produce packaging Lidstock films Skin packaging	K-RESIN DK11(E)*	SBC	1.01	B	7.5	-	420	5.5	-	-	-	-	-	110 / 200	0.015 / 0.033	8	5000 / 3100	205000 / 140000	590	185	-	92	140	< 0.9					
			K-RESIN KR52	SBC	1.01	B	9	-	210	6	-	-	-	-	-	-	260 / 80	-	27	4400 / 6500	160000 / 232000	580	142	-	92	145	< 0.9				
			K-RESIN KR53	SBC	1.02	B	10	-	275	3.5	-	-	-	-	-	-	175 / 180	0.044 / 0.055	10	3300 / 2900	109000 / 85000	-	145	-	92	140	< 0.92				

*Grades available non-lubed and lubed (E)

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PLEASE NOTE

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