For more information and technical assistance contact:

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KR53

K-Resin® Styrene-Butadiene Copolymers (SBC)

Customer Benefits

- Excellent Clarity
- High Surface Gloss
- Good Toughness
- Good Heat Sealability

Typical Applications

- Medical Packaging
- Produce Packaging
- Twist Wrap
- Lidstock and Labeling Film

Nominal Physical Properties (1)	English	SI	Method
Specific Gravity	1.02 g/cc	1.02 g/cc	ASTM D792
Melt Flow Rate, (200°C / 5.0 kg)	10.0 g/10 min	10.0 g/10 min	ASTM D1238
Vicat Softening Point(2)	145°F	63°C	ASTM D1525
Haze(3)	0.2 %	0.2 %	ASTM D1003
Gloss	140 %	140 %	ASTM D523
Dart Drop, 26 in (66 mm)	580 g	580 g	ASTM D1709
Puncture	10 in-lb	1.1 J	ASTM D3763
Oxygen Gas Transmission Rate	275 cc mil/100in^2 24 hr	110 cc mm/m^2 24 hr	ASTM D3985
Moisture Vapor Transmission Rate	3.5 g mil/100in^2 24 hr	1.5 g mm/m^2 24 hr	ASTM F1249

Nominal Physical Properties (1)	Machine	Transverse	Method
Elmendorf Tear MD	20 g	20 g	ASTM D1922
Elmendorf Tear TD	25 g	25 g	ASTM D1922
Tensile Yield Strength MD	3,300 psi	25 MPa	ASTM D882
Tensile Yield Strength TD	2,900 psi	20 MPa	ASTM D882
Elongation MD	175 %	175 %	ASTM D882
Elongation TD	180 %	180 %	ASTM D882
Secant Modulus, 1% MD	109,000 psi	750 MPa	ASTM D882
Secant Modulus, 1% TD	85,000 psi	590 MPa	ASTM D882

(1) Typical blown film properties with 3% SKR17 slip/antiblock, 1 mil (0.025 mm) film (2.5:1 BUR) 35 mil (0.90 mm) die gap. The nominal properties herein are typical of the product but do not reflect normal testing variance and therefore should not be used for specification purposes.
(2) Injection Molded Specimen.
(3) Haze was measured using blown film containing only 1% SKR19 stabilizer, 1 mil (0.025 mm) film (2.5:1 BUR) 35 mil (0.90 mm) die gap.

MEETS THESE IMPORTANT SPECIFICATIONS

- K-Resin® SBC grade KR53, as shipped by Chevron Phillips Chemical Company LP, meets the specifications of the United States FDA Food Packaging Regulation 21 CFR 177.1640 (polystyrene and rubber modified polystyrene). There are no regulatory food type or temperature restrictions on this resin.
- K-Resin® SBC grade KR53 is produced in an ISO 9001:2008 certified plant.
- Commission Regulation (EU) No. 10/2011 and all its amendments.

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