

## Chevron Phillips K-Resin® BK12 Styrene-Butadiene Copolymer, Injection Molding Grade (discontinued \*\*)

Category : Polymer , Thermoplastic , Styrene-Butadiene , Styrene-Butadiene Copolymer, SBC

### Material Notes:

**Styrene-Butadiene Copolymer Customer Benefits:** BK12 is an SBC consisting of KR01 grade with a mold release added for easier processing. BK12 molded parts give excellent detail on fast production cycles, and are easily processed by injection molding. This resin can be tinted or colored in a variety of transparent and opaque shades. Compared to KR01, BK12 offers improved mold release with the same injection molding process conditions, and equivalent molded part performance and properties. Molded parts offer excellent clarity, good toughness, good stiffness, and high surface gloss. **Applications:** Major applications include displays, medical devices, molded parts with integral hinges, housings, and toys. **Processing Recommendations:** Injection Molding: Minimum melt temperature between 193-232°C necessary to permit mold fill. Minimum injection pressure required to fill the cavity. Maximum back pressure of 0.3 MPa. Drying: Generally, no need to dry resin. **Specification Data:** FDA Regulation 21 CFR 177.1640. Suitable for contact with non-fatty foods. [Parts over 0.200 inches thick, for alcoholic beverages, or for high temperature food use (hot filled over 150°F or heat sterilized over 212°F) would require additional testing]. USP Class VI-50 Data provided by Chevron Phillips Chemical Company LP.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Chevron-Phillips-K-Resin-BK12-Styrene-Butadiene-Copolymer-Injection-Molding-Grade-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_Chevron-Phillips-K-Resin-BK12-Styrene-Butadiene-Copolymer-Injection-Molding-Grade-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Density	1.01 g/cc	0.0365 lb/in <sup>3</sup>	ASTM D792
Melt Flow	8.0 g/10 min @Load 5.00 kg, Temperature 200 °C	8.0 g/10 min @Load 11.0 lb, Temperature 392 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	75	75	ASTM D2240
Tensile Strength, Yield	30.0 MPa	4350 psi	Type 1 @ 2 in/min; ASTM D638
Elongation at Break	20 %	20 %	Type 1 @ 2 in/min; ASTM D638
Flexural Yield Strength	44.0 MPa	6380 psi	ASTM D790
Flexural Modulus	1.482 GPa	214.9 ksi	ASTM D790
Impact Test	0.700 J @Thickness 3.17 mm	0.516 ft-lb @Thickness 0.125 in	Instrumented Total Energy; @ 150 in/sec impact rate; ASTM D3763

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	77.0 °C	171 °F	ASTM D648

Vicat Softening Point Thermal Properties	93.0 °C Metric	199 °F English	ASTM D1525 Comments
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Optical Properties	Metric	English	Comments
Transmission, Visible	90 - 95 %	90 - 95 %	ASTM D1003

Processing Properties	Metric	English	Comments
Melt Temperature	193 - 232 °C	379 - 450 °F	Injection

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China