

Borealis Daplen™ KB4436 TPO Compound

Category : Polymer , Thermoplastic , Elastomer, TPE , Thermoplastic Olefinic Elastomer (TPO) , Polypropylene (PP) , TPO

Material Notes:

Daplen KB4436 is a 30% mineral and elastomer modified polypropylene compound intended for injection molding. Daplen KB4436 is a material with excellent impact/stiffness ratio. Thanks to its low thermal expansion this material is suitable to mold parts requiring low change of dimensions over a broad temperature range. The product is optimized to give good surface aesthetics. Daplen KB4436 has been developed for body side moldings, rocker panels, and window frames. Information provided by the Manufacturer.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Borealis-Daplen-KB4436-TPO-Compound.php

Physical Properties	Metric	English	Comments
Density	1.12 g/cc	0.0405 lb/in ³	ISO 1183
Linear Mold Shrinkage	0.0060 cm/cm	0.0060 in/in	Borealis Method
Melt Flow	20 g/10 min @Load 2.16 kg, Temperature 230 °C	20 g/10 min @Load 4.76 lb, Temperature 446 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	16.0 MPa	2320 psi	At 50 mm/min; ISO 527-2
Elongation at Break	123 %	123 %	At 50 mm/min; ISO 527-2
Elongation at Yield	4.0 %	4.0 %	At 50 mm/min; ISO 527-2
Tensile Modulus	2.10 GPa	305 ksi	At 1 mm/min; ISO 527-2
Flexural Strength	23.5 MPa	3410 psi	ISO 178
Flexural Modulus	2.20 GPa	319 ksi	At 2 mm/min; ISO 178
Charpy Impact Unnotched	4.50 J/cm ²	21.4 ft-lb/in ²	ISO 179/1eU
	4.50 J/cm ² @Temperature -20.0 °C	21.4 ft-lb/in ² @Temperature -4.00 °F	ISO 179/1eU
Charpy Impact, Notched	1.30 J/cm ²	6.19 ft-lb/in ²	ISO 179/1eA
	0.200 J/cm ² @Temperature -30.0 °C	0.952 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	0.350 J/cm ² @Temperature -20.0 °C	1.67 ft-lb/in ² @Temperature -4.00 °F	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear	19.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	10.6 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	Borealis Method
	@Temperature -30.0 - 80.0 $^{\circ}\text{C}$	@Temperature -22.0 - 176 $^{\circ}\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	95.0 $^{\circ}\text{C}$	203 $^{\circ}\text{F}$	ISO 75-2
Deflection Temperature at 1.8 MPa (264 psi)	51.0 $^{\circ}\text{C}$	124 $^{\circ}\text{F}$	ISO 75-2
Vicat Softening Point	36.0 $^{\circ}\text{C}$	96.8 $^{\circ}\text{F}$	B (50N); ISO 306
Shrinkage	0.10 %	0.10 %	Borealis Method

Processing Properties	Metric	English	Comments
Melt Temperature	220 - 260 $^{\circ}\text{C}$	428 - 500 $^{\circ}\text{F}$	Polymer Mass Temp
Mold Temperature	30.0 - 50.0 $^{\circ}\text{C}$	86.0 - 122 $^{\circ}\text{F}$	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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