



Monprene® S3 CP-15170 BLK

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Monprene® SX CP-15100 series of thermoplastic elastomers (TPEs) are eco-conscious materials with reduced carbon footprint. Monprene S3 CP-15170 BLK is a 70 Shore A TPE designed with a minimum of 30% sustainable content, including post-consumer recycled (PCR) material and UBQ™, a bio-based thermoplastic made from 100% unsorted household waste. A more sustainable alternative to standard TPE, this material reduces dependency on virgin petroleum-based plastics and contributes toward a circular economy. Monprene S3 CP-15170 BLK is a high-flow TPE for injection molding applications of overmolding onto polypropylene, and processes and performs like prime TPE.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Recycled Content	• Post-Consumer (PCR)		
Features	• Chemical Resistant • Environmentally Sound/ Sustainable • Good Adhesion • Good Flexibility • Good Moldability	• Good Processability • Good Toughness • Halogen Free • High Elongation • High Flow	• High Tensile Strength • Low Density • Medium Hardness • Resilient
Uses	• Consumer Applications • Flexible Grips • General Purpose • Handles	• Knobs • Lawn & Garden Equipment • Luggage • Overmolding	• Rubber Replacement • Soft Touch Applications • Sporting Goods • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.912		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	35	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (100% Strain)	305	psi	ASTM D412
Tensile Strength ² (Break)	522	psi	ASTM D412
Tensile Elongation - Across Flow ² (Break)	500	%	ASTM D412
Tear Strength ²	152	lbf/in	ASTM D624
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	73		
Shore A, 5 sec, Injection Molded	70		

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	311 to 356	°F
Middle Temperature	320 to 383	°F
Front Temperature	320 to 383	°F
Nozzle Temperature	320 to 383	°F
Processing (Melt) Temp	320 to 383	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Moderate-Fast	

Injection Notes

Dry the pellets for 2 to 4 hours at 150°F (65°C).

Notes

¹ Typical properties: these are not to be construed as specifications.

² Die C, 20 in/min