



Monprene® R6 CP-10170 NAT

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Monprene RX CP-10100 Series of thermoplastic elastomer compounds is formulated to contain post-consumer (PCR) content, reducing dependency on virgin petroleum-based plastic and contributing towards a circular economy. These materials are designed specifically for consumer product applications requiring a soft, rubber-like feel. Monprene R6 CP-10170 NAT is a medium hardness, low density, unfilled grade that is suitable for injection molding and contains minimum 60% PCR content.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Recycled Content	• Post-Consumer (PCR), 60%		
Features	• Chemical Resistant • General Purpose • Good Adhesion	• Good Colorability • Good Flexibility • Good Processability	• Low Density • Low Hardness • Low Specific Gravity
Uses	• Appliances • Consumer Applications • Flexible Grips • Furniture • Handles	• Household Goods • Knobs • Personal Care • Rubber Replacement • Safety Equipment	• Soft Touch Applications • Stationary Supplies • Toys • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.882		ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	40	g/10 min	ISO 1133
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Across Flow : 100% Strain	276	psi	
Flow : 100% Strain	276	psi	
Tensile Stress			ISO 37
Across Flow : Break	1640	psi	
Flow : Break	1420	psi	
Tensile Elongation			ISO 37
Across Flow : Break	900	%	
Flow : Break	850	%	
Tear Strength ²			ISO 34-1
Across Flow	112	lbf/in	
Flow	111	lbf/in	
Compression Set			ISO 815
73°F, 70 hr	28	%	
158°F, 24 hr	53	%	
212°F, 24 hr	66	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, 3 sec)	70		ISO 868

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	320 to 356	°F
Middle Temperature	338 to 374	°F
Front Temperature	356 to 392	°F
Nozzle Temperature	356 to 392	°F
Processing (Melt) Temp	356 to 392	°F
Mold Temperature	68 to 122	°F
Injection Rate	Moderate-Fast	

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 65 °C (150 °F).

Notes

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

² Method A, Trouser