



Monprene® CP-28114

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-28114, available in NAT and colors, is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-28114 is a low density, low hardness, lubricated grade that is suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Compression Set • Good Flow • Good Melt Strength • Good Mold Release • Good Moldability	• Low Compression Set • Low Density • Low Hardness • Low Specific Gravity • Lubricated	• Medium Flow • Soft • Without Fillers
Uses	• Consumer Applications • Gaskets	• Handles • Rubber Replacement	• Tubing
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.880		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	4.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	62.0	psi	
Flow : 100% Strain	108	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	113	psi	
Flow : 300% Strain	156	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	658	psi	
Flow : Break	226	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	800	%	
Flow : Break	580	%	
Tear Strength ²			ASTM D624
Across Flow	73.0	lbf/in	
Flow	51.0	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	8.8	%	
158°F, 22 hr	31	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	17		
Shore A, 5 sec, Injection Molded	14		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	420 to 460	°F
Middle Temperature	420 to 460	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	420 to 460	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Back Pressure	25.0 to 100	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 1.00	in

Injection Notes

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

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	400 to 440	°F
Cylinder Zone 2 Temp.	400 to 440	°F
Cylinder Zone 3 Temp.	400 to 440	°F
Cylinder Zone 4 Temp.	400 to 440	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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

² Die C, 20 in/min

³ Type 1