



Monprene® PR-12432

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene® PR-12432 is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene® PR-12432 is a low hardness, opaque grade that exhibits excellent mold release, suitable for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Colorability • Good Flexibility • Good Flow • Good Mold Release • Good Moldability	• Good Processability • Good Tear Strength • High Elasticity • Low Density • Low Hardness	• Low Specific Gravity • Slip • Without Fillers
Uses	• Consumer Applications • Flexible Grips	• Handles • Rubber Replacement	• Safety Equipment
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.892		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	100	psi	ASTM D412
Tensile Stress (300% Strain)	195	psi	ASTM D412
Tensile Strength (Break)	940	psi	ASTM D412
Tensile Elongation (Break)	820	%	ASTM D412
Tear Strength - Flow ²	129	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	12	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, Injection Molded	30		
Shore A, 5 sec, Injection Molded	28		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F

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Injection	Nominal Value	Unit
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°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).

Notes

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

² Die C