



Monprene® PR-12241

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene PR-12241, 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 PR-12241 is a low density, low hardness, RoHS compliant grade suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Good Colorability • Good Mold Release • Good Moldability	• Good Processability • Light Stabilized • Low Density • Low Flow	• Low Hardness • Low Specific Gravity • Slip • Without Fillers
Uses	• Consumer Applications • Gaskets	• Handles • Safety Equipment	• Tubing
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.882		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	1.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	187	psi	
Flow : 100% Strain	296	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	337	psi	
Flow : 300% Strain	489	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1370	psi	
Flow : Break	566	psi	
Tensile Elongation ²			ASTM D412
Break	760	%	
Flow : Break	400	%	
Compression Set ³			ASTM D395B
73°F, 22 hr	15	%	
158°F, 22 hr	68	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	45		
Shore A, 5 sec, Injection Molded	43		

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 420	°F
Middle Temperature	370 to 430	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 430	°F
Processing (Melt) Temp	390 to 430	°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.	360 to 420	°F
Cylinder Zone 2 Temp.	370 to 430	°F
Cylinder Zone 3 Temp.	380 to 430	°F
Cylinder Zone 4 Temp.	380 to 430	°F
Cylinder Zone 5 Temp.	390 to 430	°F
Die Temperature	390 to 430	°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