



Monprene® RG-24465

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-24465 is a high performance thermoplastic elastomer, available in NAT and colors, designed for regulated applications including food contact, toys, and children's products. Monprene RG-24465 is a medium hardness, low density, unfilled, lubricated grade with excellent adhesion to PP and complies with various US FDA regulations and EU directives for food contact. This grade is suitable for injection molding and extrusion. Please contact Teknor Apex for a regulatory compliance letter.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Low Density • Low Flow • Low Specific Gravity	• Lubricated • Medium Hardness • Slip	• Without Fillers
Uses	• Consumer Applications • Gaskets • Hose	• Kitchenware • Non-specific Food Applications • Safety Equipment	• Tubing
Agency Ratings	• EU Food Contact	• FDA Food Contact	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.40	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	300	psi	
Flow : 100% Strain	400	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	406	psi	
Flow : 300% Strain	500	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1500	psi	
Flow : Break	800	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	820	%	
Flow : Break	620	%	
Tear Strength ²			ASTM D624
Across Flow	210	lbf/in	
Flow	170	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	25	%	
158°F, 22 hr	45	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	67		
Shore A, 5 sec	64		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°F
Mold Temperature	95 to 120	°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 450	°F
Cylinder Zone 2 Temp.	370 to 460	°F
Cylinder Zone 3 Temp.	380 to 470	°F
Cylinder Zone 4 Temp.	380 to 470	°F
Cylinder Zone 5 Temp.	390 to 480	°F
Die Temperature	390 to 480	°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