



Monprene® RG-50065B (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-50065B is a high performance thermoplastic elastomer with exceptional organoleptic properties designed for a variety of packaging applications including cap liners. Monprene RG-50065B is a medium hardness, low density grade with excellent oxygen barrier performance. Please contact your Teknor Apex rep for applicable regulatory compliance letters.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Barrier Resin • Food Contact Acceptable • Good Adhesion • Good Colorability	• Good Organoleptic Properties • Good Processability • Halogen Free • High Elongation	• Low Density • Oxygen Barrier
Uses	• Closures • Consumer Applications • Fluid Handling • Food Containers	• Food Packaging • Food Service Applications • Gaskets • Kitchenware	• Lids • Non-specific Food Applications
Agency Ratings	• FDA Food Contact		
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.910		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	20	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ^{2, 3} (100% Strain)	340	psi	ASTM D412
Tensile Strength (Break)	900	psi	ASTM D412
Tensile Elongation ^{2, 3} (Break)	650	%	ASTM D412
Compression Set ^{4, 3} (158°F, 22 hr)	48	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness ³			ASTM D2240
Shore A, 1 sec, Injection Molded	65		
Shore A, 5 sec, Injection Molded	63		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	320 to 360	°F

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Injection	Nominal Value	Unit
Middle Temperature	330 to 370	°F
Front Temperature	340 to 380	°F
Nozzle Temperature	350 to 390	°F
Processing (Melt) Temp	360 to 410	°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.	320 to 360	°F
Cylinder Zone 2 Temp.	330 to 370	°F
Cylinder Zone 3 Temp.	340 to 380	°F
Cylinder Zone 4 Temp.	350 to 390	°F
Cylinder Zone 5 Temp.	360 to 410	°F
Die Temperature	360 to 410	°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 TBD

⁴ Type 1