



Monprene® RG-51260

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-51260 is a high performance thermoplastic elastomer with exceptional organoleptic properties that also provides excellent sealing properties when used in hot-fill cap liner applications. Every ingredient used to formulate this product is either "generally recognized as safe" (GRAS), prior sanctioned, subject to an effective Food Contact Notification (FCN), subject to a Threshold of Regulation (TOR) or identified in one or more sections of Title 21 of the code of Federal Regulations published by the US FDA. Monprene RG-51260 is suitable for PP closures. Please contact your Teknor Apex representative for a regulatory compliance letter.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Moldability • Good Processability • Low Density	• Low Specific Gravity • Lubricated • Medium Flow	• Medium Hardness • Without Fillers
Uses	• Caps • Closures	• Consumer Applications • Packaging	
Agency Ratings	• FDA Food Contact		
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available • Natural Color	• Translucent • White	• White
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)	8.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength ²			ASTM D412
Across Flow : Break	2030	psi	
Flow : Break	2050	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	710	%	
Flow : Break	760	%	
Compression Set ³ (73°F, 22 hr)	16	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	62		
Shore A, 5 sec, Injection Molded	60		

Additional Information

This product is not recommended for use in contact with food stuffs beyond one year passed the date of manufacture.

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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