

Monprene® RG-10150

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Monprene RG-10100 series is a group of high performance thermoplastic elastomers specifically designed for regulated applications including food contact, toys, and children's products. Monprene RG-10150 is a low density, medium hardness grade that complies with various US FDA and European regulations and directives for food contact and toy safety and is suitable for injection molding. Please contact Teknor Apex for a regulatory compliance letter.

General			
Material Status	Commercial: Active		
Availability	 Africa & Middle East Europe	Latin AmericaNorth America	
Features	 BPA Free Food Contact Acceptable Good Adhesion Good Colorability Good Processability 	 Low Density Low Flow Low Specific Gravity Lubricated Medium Hardness 	 No Animal Derived Components Slip Without Fillers
Uses	ClosuresConsumer ApplicationsCosmetic PackagingFood Containers	 Food Packaging Food Service Applications Handles Kitchenware 	 Lids Non-specific Food Applications Rubber Replacement Toys
Agency Ratings	EU Food Contact	FDA Food Contact	
RoHS Compliance	RoHS Compliant		
Appearance	Colors Available	Natural Color	Translucent
Forms	Pellets		
Processing Method	Injection Molding		

ASTM & ISO Properties ¹				
Physical	Nominal Value	Unit	Test Method	
Density / Specific Gravity	0.880		ISO 1183	
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	6.0	g/10 min	ASTM D1238	
Elastomers	Nominal Value	Unit	Test Method	
Tensile Stress - Across Flow (100% Strain)	126	psi	ISO 37	
Tensile Stress - Across Flow (Break)	986	psi	ISO 37	
Tensile Elongation - Across Flow (Break)	840	%	ISO 37	
Tear Strength ²			ISO 34-1	
Across Flow	62.8	lbf/in		
Flow	108	lbf/in		
Compression Set ³			ISO 815	
73°F, 70 hr	20	%		
158°F, 22 hr	37	%		
Hardness	Nominal Value	Unit	Test Method	
Shore Hardness			ISO 868	
Shore A, 1 sec	52			
Shore A, 5 sec	50			
Fill Analysis	Nominal Value	Unit	Test Method	
Apparent Viscosity (392°F, 206 sec^-1)	226	Pa·s	ASTM D3835	



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Processing Information			
njection	Nominal Value Unit		
Rear Temperature	320 to 350 °F		
Middle Temperature	360 to 400 °F		
Front Temperature	380 to 420 °F		
Nozzle Temperature	360 to 440 °F		
Processing (Melt) Temp	360 to 440 °F		
Mold Temperature	80 to 120 °F		
Injection Rate	Moderate-Fast		
Back Pressure	25.0 to 100 psi		
Screw Speed	50 to 100 rpm		
Cushion	0.150 to 0.500 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 Method Ba, Angle (Unnicked)

³ Type A