



Monprene® RG-15180

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Monprene RG-15100 series is a group of high performance thermoplastic elastomers specifically designed for food contact applications requiring superior resistance to high temperature and chemicals. Monprene RG-15180 is a medium density, low 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 America • North 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	• Closures • Consumer Applications • Cosmetic Packaging • Food 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	• Translucent	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.892		ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Across Flow : 100% Strain	450	psi	
Flow : 100% Strain	725	psi	
Tensile Stress			ISO 37
Across Flow : Break	2760	psi	
Flow : Break	1450	psi	
Tensile Elongation			ISO 37
Across Flow : Break	860	%	
Flow : Break	570	%	
Tear Strength ²			ISO 34-1
Across Flow	188	lbf/in	
Flow	160	lbf/in	
Compression Set			ISO 815
73°F, 70 hr ³	38	%	
158°F, 24 hr	47	%	
212°F, 24 hr	57	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, 5 sec)	80		ISO 868

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Processing Information

Injection	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