

## TEKNOR APEX

# Monprene® RG-19140 NAT XRD1 (PRELIMINARY DATA)

## Teknor Apex Company - Thermoplastic Elastomer

### **General Information**

#### **Product Description**

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Monprene RG-19140 NAT XRD1 is a high performance thermoplastic elastomer, available in NAT and colors, designed for regulated applications including food contact. Monprene RG-19140 NAT XRD1 is medium hardness, low density, RoHS compliant grade with excellent adhesion to PP and complies with various US FDA regulations for food contact. This grade is suitable for injection molding. Please contact Teknor Apex for a regulatory compliance letter.

Material Status	<ul> <li>Preliminary Data</li> </ul>		
Availability	Asia Pacific	Europe	North America
Features	Chemical Resistant	Good Flexibility	
	<ul> <li>Food Contact Acceptable</li> </ul>	<ul> <li>Good Moldability</li> </ul>	<ul> <li>High Hardness</li> </ul>
	<ul> <li>Good Adhesion</li> </ul>	<ul> <li>Good Tear Strength</li> </ul>	<ul> <li>Medium Density</li> </ul>
	<ul> <li>Good Colorability</li> </ul>	<ul> <li>Good Toughness</li> </ul>	
Uses	Closures	Kitchenware	
	<ul> <li>Consumer Applications</li> </ul>	<ul> <li>Packaging</li> </ul>	<ul> <li>Toothbrush Handles</li> </ul>
	<ul> <li>Gaskets</li> </ul>	<ul> <li>Rubber Replacement</li> </ul>	Tubing
	Handles	<ul> <li>Safety Equipment</li> </ul>	
Agency Ratings	FDA Food Contact		
RoHS Compliance	RoHS Compliant		
Appearance	Colors Available	Natural Color	<ul> <li>Translucent</li> </ul>
Forms	Pellets		
Processing Method	Injection Molding		

## ASTM & ISO Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.882		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break)	363	psi	ASTM D412
Tensile Elongation (Break)	120	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	42		
Shore A, 5 sec	40		

Processing Information			
Injection	Nominal Value Unit		
Rear Temperature	340 to 380 °F		
Middle Temperature	350 to 400 °F		
Front Temperature	360 to 410 °F		



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Injection	Nominal Value	Unit
Nozzle Temperature	370 to 420	°F
Processing (Melt) Temp	370 to 420	°F
Mold Temperature	77 to 150	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 50.0	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).

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.