



Monprene® RG-17182 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-17182 XRD1 is a high performance thermoplastic elastomer, available in NAT and colors, designed for regulated applications including food contact. Monprene RG-17182 XRD1 is a high hardness, medium 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.

General

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

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.982		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	650	psi	ASTM D412
Tensile Stress - Flow (300% Strain)	860	psi	ASTM D412
Tensile Strength - Flow (Break)	1650	psi	ASTM D412
Tensile Elongation - Flow (Break)	660	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	85		
Shore A, 5 sec	83		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	340 to 380	°F

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Injection	Nominal Value	Unit
Middle Temperature	350 to 400	°F
Front Temperature	360 to 410	°F
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

¹ Typical properties: these are not to be construed as specifications.