



Monprene® RG-15850 XRD3 (Preliminary Data)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-15850 is a high performance thermoplastic elastomer, available colors, designed for regulated applications including food contact, toys, and children's products. Monprene RG-15850 is a low hardness, low density grade with excellent adhesion to PP and complies with various US FDA regulations and EU directives for food contact. This grade is suitable for injection molding. Please contact Teknor Apex for a regulatory compliance letter.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Adhesion • Good Organoleptic Properties • Good Processability	• High Elongation • Low Density • Low Hardness	• Slip
Uses	• Closures • Consumer Applications • Cookware Handles • Cups	• Fluid Handling • Food Service Applications • Kitchenware • Lids	• Non-specific Food Applications • Overmolding • Toothbrush Handles • Toys
Agency Ratings	• EU Food Contact	• FDA	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.882		ISO 1183
Melt Mass-Flow Rate (MFR) ² (200°C/2.16 kg)	17	g/10 min	ISO 1133
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Across Flow : 100% Strain	160	psi	
Flow : 100% Strain	174	psi	
Tensile Stress			ISO 37
Across Flow : 300% Strain	232	psi	
Flow : 300% Strain	261	psi	
Tensile Strength			ISO 37
Across Flow : Break	1280	psi	
Flow : Break	885	psi	
Tensile Elongation			ISO 37
Across Flow : Break	960	%	
Flow : Break	820	%	
Tear Strength			ISO 34-1
Across Flow	74.2	lbf/in	
Flow	68.5	lbf/in	
Compression Set			ISO 815
73°F, 70 hr	29	%	
158°F, 22 hr	42	%	
212°F, 22 hr	55	%	

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Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, 3 sec)	48		ISO 868

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	320 to 356	°F
Middle Temperature	356 to 428	°F
Front Temperature	356 to 464	°F
Nozzle Temperature	356 to 464	°F
Processing (Melt) Temp	356 to 464	°F
Mold Temperature	68 to 95	°F
Injection Rate	Moderate-Fast	

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 Procedure A