



Monprene® RG-13270

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-13270 is a high performance thermoplastic elastomer, available in NAT and colors, designed for regulated applications including food contact, toys, and children's products. Monprene RG-13270 is a medium hardness, medium 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	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Food Contact Acceptable • Good Adhesion • Good Colorability • Good Melt Strength	• Good Organoleptic Properties • Good Processability • Halogen Free • High Elongation	• Low Compression Set • Medium Density • Medium Hardness • Slip
Uses	• Closures • Consumer Applications • Cookware Handles • Cups • Film • Fluid Handling	• Food Containers • Food Packaging • Food Service Applications • Gaskets • Kitchenware • Lids	• Non-specific Food Applications • Overmolding • Toothbrush Handles • Toys • Tubing
Agency Ratings	• EU Food Contact	• FDA	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.992		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	4.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Across Flow : 100% Strain	280	psi	
Flow : 100% Strain	490	psi	
Tensile Stress			ASTM D412
Across Flow : 300% Strain	410	psi	
Flow : 300% Strain	610	psi	
Tensile Strength			ASTM D412
Across Flow : Break	1500	psi	
Flow : Break	660	psi	
Tensile Elongation			ASTM D412
Across Flow : Break	790	%	
Flow : Break	420	%	
Tear Strength			ASTM D624
Across Flow	210	lbf/in	
Flow	170	lbf/in	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	68		
Shore A, 5 sec, Injection Molded	66		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	340 to 420	°F
Middle Temperature	340 to 420	°F
Front Temperature	340 to 420	°F
Nozzle Temperature	340 to 420	°F
Processing (Melt) Temp	340 to 420	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Back Pressure	25.0 to 100	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.