



Monprene® RG-13271

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-13271 is specifically designed for food contact applications and other regulated markets such as children's and infants products. Every ingredient used to formulate Monprene RG-13271 is either "generally recognized as safe" (GRAS), prior sanctioned, subject to an effective Food Contact Notification (FCN), subject to a Threshold of Regulation (TOR) or identified in one or more sections of Title 21 of the code of Federal Regulations published by the US FDA. This product is suitable for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Filled • Food Contact Acceptable • Good Colorability	• Good Mold Release • Good Moldability • Good Processability • Medium Density	• Medium Flow • Medium Hardness • Slip
Uses	• Consumer Applications • Gaskets • Handles	• Kitchenware • Safety Equipment • Sporting Goods	• Toothbrush Handles • Tubing • Writing Instruments
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	1.01		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	314	psi	
Flow : 100% Strain	488	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	445	psi	
Flow : 300% Strain	649	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1570	psi	
Flow : Break	994	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	790	%	
Flow : Break	550	%	
Tear Strength ²			ASTM D624
Across Flow	185	lbf/in	
Flow	172	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	22	%	
158°F, 22 hr	44	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	73		
Shore A, 5 sec, Injection Molded	71		

Processing Information			
Injection	Nominal Value	Unit	
Rear Temperature	340 to 380	°F	
Middle Temperature	350 to 390	°F	
Front Temperature	360 to 400	°F	
Nozzle Temperature	370 to 410	°F	
Processing (Melt) Temp	370 to 410	°F	
Mold Temperature	60 to 90	°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.

² Die C, 20 in/min

³ Type 1