



Monprene® RG-24460 XRD (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-24460 is specifically designed for regulated applications including food contact, toys, and children's products. This grade is suitable for injection molding and extrusion. Monprene RG-24460 complies with various US FDA and European regulations and directives for food contact and toy safety. 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	• Low Density • Low Flow • Low Specific Gravity	• Lubricated • Medium Hardness • Slip	• Without Fillers
Uses	• Consumer Applications • Gaskets • Handles	• Kitchenware • Safety Equipment • Sporting Goods	• Toothbrush Handles • Tubing • Writing Instruments
Agency Ratings	• EU Food Contact, Unspecified Rating	• FDA Food Contact, Unspecified Rating	
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.50	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	282	psi	
Flow : 100% Strain	384	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	406	psi	
Flow : 300% Strain	500	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1420	psi	
Flow : Break	769	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	820	%	
Flow : Break	620	%	
Tear Strength ²			ASTM D624
Across Flow	199	lbf/in	
Flow	162	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	22	%	
158°F, 22 hr	43	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	62		
Shore A, 5 sec	60		

Processing Information			
Injection	Nominal Value	Unit	
Rear Temperature	360 to 450	°F	
Middle Temperature	370 to 460	°F	
Front Temperature	380 to 470	°F	
Nozzle Temperature	390 to 480	°F	
Processing (Melt) Temp	390 to 480	°F	
Mold Temperature	95 to 120	°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).

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	360 to 450	°F
Cylinder Zone 2 Temp.	370 to 460	°F
Cylinder Zone 3 Temp.	380 to 470	°F
Cylinder Zone 5 Temp.	390 to 480	°F
Die Temperature	390 to 480	°F

Extrusion Notes
Screw Speed: 30 to 100 rpm

Notes

¹ Typical properties: these are not to be construed as specifications.
² Die C, 20 in/min
³ Type 1