

Monprene® RG-24460 XRD (PRELIMINARY DATA)

Thermoplastic Elastomer
Teknor Apex Company

Message:
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 Information			
Features	Low Specific Gravity		
	Without Fillers		
	Low density		
	smoothness		
	Low liquidity		
	Lubrication		
	Medium hardness		
Uses	Safety equipment		
	Handle		
	Kitchen utensils		
	Washer		
	Pipe fittings		
	Sporting goods		
	Stationery		
	Consumer goods application field		
Agency Ratings	Toothbrush handle		
Agency Ratings	FDA Food Exposure, Not Rated		
	European food contact, not rated		
Appearance	Natural color		
Forms	Particle		
Processing Method	Extrusion		
	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.888	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.50	g/10 min	ASTM D1238

Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shaw A	62		ASTM D2240
Shaw A, 5 seconds	60		ASTM D2240
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Transverse flow: 100% strain ¹	1.94	MPa	ASTM D412
Flow: 100% strain ²	2.65	MPa	ASTM D412
Transverse flow: 300% strain ³	2.80	MPa	ASTM D412
Flow: 300% strain ⁴	3.45	MPa	ASTM D412
Tensile Strength ⁵			ASTM D412
Transverse flow: Fracture	9.78	MPa	ASTM D412
Flow: Fracture	5.30	MPa	ASTM D412
Tensile Elongation ⁶			ASTM D412
Transverse flow: Fracture	820	%	ASTM D412
Flow: Fracture	620	%	ASTM D412
Tear Strength ⁷			ASTM D624
Transverse flow	34.9	kN/m	ASTM D624
Flow	28.4	kN/m	ASTM D624
Compression Set ⁸			ASTM D395B
23°C, 22 hr	22	%	ASTM D395B
70°C, 22 hr	43	%	ASTM D395B
Injection	Nominal Value	Unit	
Rear Temperature	182 - 232	°C	
Middle Temperature	188 - 238	°C	
Front Temperature	193 - 243	°C	
Nozzle Temperature	199 - 249	°C	
Processing (Melt) Temp	199 - 249	°C	
Mold Temperature	35.0 - 48.9	°C	
Injection Pressure	1.38 - 5.52	MPa	
Injection Rate	Fast		
Back Pressure	0.172 - 0.689	MPa	
Screw Speed	50 - 100	rpm	
Cushion	3.81 - 25.4	mm	
Injection instructions			
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.	182 - 232	°C	
Cylinder Zone 2 Temp.	188 - 238	°C	
Cylinder Zone 3 Temp.	193 - 243	°C	
Cylinder Zone 5 Temp.	199 - 249	°C	
Die Temperature	199 - 249	°C	

Extrusion instructions

Screw Speed: 30 to 100 rpm

NOTE

1.	Mouth die C, 510mm/min
2.	Mouth die C, 510mm/min
3.	C mold, 510mm/min
4.	C mold, 510mm/min
5.	C mold, 510mm/min
6.	Mouth die C, 510mm/min
7.	C mold, 510mm/min
8.	Type 1

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

