

Monprene® RG-19221 NAT

Thermoplastic Elastomer

Teknor Apex Company

Message:

Monprene RG-19221 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-19221 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 Information			
Features	Low Specific Gravity		
	Without Fillers		
	Low density		
	smoothness		
	High liquidity		
	Soft		
	Hardness, low		
Uses	Safety equipment		
	Handle		
	Packaging		
	Kitchen utensils		
	Washer		
	Pipe fittings		
	Sporting goods		
	Stationery		
	Consumer goods application field		
Appearance	Natural color		
	Particle		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.888	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (175°C/2.16 kg)	60	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 second, injection molding	22		ASTM D2240
Shore A, 5 seconds, injection molding	21		ASTM D2240
Elastomers	Nominal Value	Unit	Test Method

Tensile Stress			ASTM D412
Transverse flow: 100% strain ¹	0.510	MPa	ASTM D412
Flow: 100% strain ²	0.834	MPa	ASTM D412
Transverse flow: 300% strain ³	1.03	MPa	ASTM D412
Flow: 300% strain ⁴	1.41	MPa	ASTM D412
Tensile Strength ⁵			ASTM D412
Transverse flow: Fracture	3.24	MPa	ASTM D412
Flow: Fracture	1.94	MPa	ASTM D412
Tensile Elongation ⁶			ASTM D412
Transverse flow: Fracture	750	%	ASTM D412
Flow: Fracture	570	%	ASTM D412
Tear Strength ⁷			ASTM D624
Transverse flow	13.5	kN/m	ASTM D624
Flow	9.81	kN/m	ASTM D624
Compression Set ⁸			ASTM D395B
23°C, 22 hr	30	%	ASTM D395B
70°C, 22 hr	95	%	ASTM D395B
Injection	Nominal Value	Unit	
Rear Temperature	160 - 210	°C	
Middle Temperature	166 - 216	°C	
Front Temperature	171 - 221	°C	
Nozzle Temperature	177 - 227	°C	
Processing (Melt) Temp	177 - 227	°C	
Mold Temperature	15.6 - 37.8	°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 2

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

