



Monprene® WR-13968

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene WR-13968 is a general purpose thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene WR-13968 is a medium hardness grade suitable for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Filled • Good Colorability • Good Mold Release • Good Moldability	• Good Processability • High Flow • Light Stabilized • Medium Density	• Medium Hardness • Slip
Uses	• Consumer Applications • Gaskets • Handles	• Kitchenware • Safety Equipment • Sporting Goods	• 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	1.10		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	40	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	275	psi	
Flow : 100% Strain	339	psi	
Tensile Stress - Across Flow ² (300% Strain)	340	psi	ASTM D412
Tensile Strength ²			ASTM D412
Across Flow : Break	407	psi	
Flow : Break	374	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	330	%	
Flow : Break	210	%	
Tear Strength ²			ASTM D624
Across Flow	86.0	lbf/in	
Flow	91.0	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	25	%	
158°F, 22 hr	52	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	70		
Shore A, 5 sec, Injection Molded	68		

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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	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.

² Die C, 20 in/min

³ Type 1