+135-3858-6433 (GuangDong)
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TEKNOR APEX

Monprene® WR-12263

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene WR-12263 is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene WR-12263 is a low density, medium hardness, medium flow grade, suitable for injection molding and extrusion.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Low Density • Low Specific Gravity • Lubricated	• Medium Flow • Medium Hardness • Slip	• Without Fillers
Uses	• Consumer Applications • Handles • Kitchenware	• Packaging • Safety Equipment • Sporting Goods	• Tubing • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2]			ASTM D412
Across Flow : 100% Strain	257	psi	
Flow : 100% Strain	344	psi	
Tensile Stress [2]			ASTM D412
Across Flow : 300% Strain	382	psi	
Flow : 300% Strain	470	psi	
Tensile Strength [2]			ASTM D412
Across Flow : Break	1380	psi	
Flow : Break	646	psi	
Tensile Elongation [2]			ASTM D412
Across Flow : Break	800	%	
Flow : Break	530	%	
Tear Strength [2]			ASTM D624
Across Flow	159	lbf/in	
Flow	145	lbf/in	
Compression Set [3]			ASTM D395B
73°F, 22 hr	22	%	
158°F, 22 hr	55	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	60		
Shore A, 5 sec, Injection Molded	58		

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Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -76.0	°F	ASTM D746
Additional Information			
Sebum Oil Swell, 50°C = 6%			
Alcohol Resistance, PDL Resistance Rating = 6			
Acid and Base Resistance, PDL Resistance Rating = 8			

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).		

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