



Monprene® MP-1473F

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene MP-1473F is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene MP-1473F is a low density, medium hardness grade suitable for both injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Light Stabilized • Low Density	• Low Flow • Low Specific Gravity	• Medium Hardness • Without Fillers
Uses	• Consumer Applications • Gaskets	• Safety Equipment • Sporting Goods	• Tubing • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.900		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	4.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	525	psi	
Flow : 100% Strain	754	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	945	psi	
Flow : 300% Strain	1200	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	2380	psi	
Flow : Break	2010	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	680	%	
Flow : Break	610	%	
Tear Strength ²			ASTM D624
Across Flow	364	lbf/in	
Flow	321	lbf/in	
Compression Set ³ (73°F, 22 hr)	24	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	75		
Shore A, 5 sec, Injection Molded	73		

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Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	400 to 450	°F
Middle Temperature	400 to 450	°F
Front Temperature	400 to 450	°F
Nozzle Temperature	400 to 450	°F
Processing (Melt) Temp	400 to 450	°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.	380 to 430	°F
Cylinder Zone 2 Temp.	380 to 430	°F
Cylinder Zone 3 Temp.	380 to 430	°F
Cylinder Zone 4 Temp.	380 to 430	°F
Cylinder Zone 5 Temp.	380 to 430	°F
Die Temperature	380 to 430	°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		