



Monprene® MP-2104

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene MP-2104 is a general purpose thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene MP-2104 is a low hardness, opaque grade that exhibits excellent mold release, suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Colorability • Good Flexibility	• Good Flow • Good Mold Release	• Good Tear Strength • High Elasticity
Uses	• Consumer Applications • Flexible Grips • Handles	• Safety Equipment • Sporting Goods • Toothbrush Handles	• 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	0.880		ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	1.5	g/10 min	
200°C/5.0 kg	18	g/10 min	
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	100	psi	ASTM D412
Tensile Stress (300% Strain)	195	psi	ASTM D412
Tensile Strength (Break)	940	psi	ASTM D412
Tensile Elongation (Break)	820	%	ASTM D412
Tear Strength - Flow ²	129	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	12	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	30		
Shore A, 5 sec	28		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F

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Injection	Nominal Value	Unit
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 4 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