

Monprene® PR-13250

Teknor Apex Company - Thermoplastic Elastomer

Tuesday, July 30, 2024

General Information

Product Description

Monprene PR-13250 is a general purpose thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene PR-13250 is a medium hardness grade that is suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Adhesion • Good Colorability • Good Dimensional Stability • Good Tear Strength	• Good Toughness • Halogen Free • Low Density • Low Specific Gravity • Lubricated	• Medium Flow • Medium Hardness • Slip • Without Fillers
Uses	• Consumer Applications • Gaskets	• Handles • Safety Equipment	• 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	0.888	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	20	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	1.45	MPa	
Flow : 100% Strain	2.07	MPa	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	2.21	MPa	
Flow : 300% Strain	2.83	MPa	
Tensile Strength ²			ASTM D412
Across Flow : Break	7.03	MPa	
Flow : Break	4.07	MPa	
Tensile Elongation ²			ASTM D412
Across Flow : Break	730	%	
Flow : Break	530	%	
Tear Strength ²			ASTM D624
Across Flow	30.6	kN/m	
Flow	24.5	kN/m	
Compression Set ³			ASTM D395B
23°C, 22 hr	19	%	
70°C, 22 hr	44	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	55		
Shore A, 5 sec, Injection Molded	54		

Revision Date: 6/10/2024

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchasers assume all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or by others. There is no warranty of merchantability and there are no other warranties for the products described.

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Legal Statement

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	170 to 190	°C
Middle Temperature	180 to 220	°C
Front Temperature	190 to 230	°C
Nozzle Temperature	190 to 230	°C
Processing (Melt) Temp	190 to 230	°C
Mold Temperature	35 to 49	°C
Injection Pressure	1.38 to 5.52	MPa
Injection Rate		Fast
Back Pressure	0.172 to 0.689	MPa
Screw Speed	50 to 100	rpm
Cushion	3.81 to 25.4	mm

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.	182 to 232	°C
Cylinder Zone 2 Temp.	188 to 238	°C
Cylinder Zone 3 Temp.	193 to 243	°C
Cylinder Zone 4 Temp.	199 to 249	°C
Cylinder Zone 5 Temp.	199 to 249	°C
Die Temperature	199 to 249	°C

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

² Die C, 510 mm/min

³ Type 1

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