



Monprene® CP-22147

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-22147 is a clear thermoplastic elastomer, available in natural and pre-colored, designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-22147 is a low density, medium hardness, ozone-resistant, weatherable grade that exhibits good abrasion resistance/toughness and is suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Good Adhesion • Good Tear Strength • Good Toughness	• Good Weather Resistance • Low Density • Low Specific Gravity • Low Temperature Flexibility	• Medium Hardness • Ozone Resistant
Uses	• Consumer Applications • Flexible Grips • Gaskets • General Purpose	• Handles • Knobs • Plugs • Profiles	• Rubber Replacement • Soft Touch Applications • Sporting Goods • Toys
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent • Colors Available	• Light Blue • Natural Color	
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) (200°C/5.0 kg)	1.5	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	265	psi	ASTM D412
Tensile Stress (200% Strain)	410	psi	ASTM D412
Tensile Stress (300% Strain)	600	psi	ASTM D412
Tensile Strength (Break)	2000	psi	ASTM D412
Tensile Elongation (Break)	640	%	ASTM D412
Tear Strength ²	250	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	13	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	52		
Shore A, 5 sec	50		

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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	95 to 120	°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