



Monprene® CP-22442 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-22442 is a high performance thermoplastic elastomer, available in NAT and colors, designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-22442 is a translucent, medium hardness, low density, unfilled grade that is suitable for extrusion and injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Colorability • Good Flexibility • Good Processability • Good Toughness	• Low Density • Low Specific Gravity • Lubricated • Medium Flow • Medium Hardness	• Resilient • Slip • Without Fillers
Uses	• Consumer Applications • Flexible Grips • Gaskets • General Purpose • Grommets	• Handles • Knobs • Luggage • O-rings • Overmolding	• Plugs • Rubber Replacement • Safety Equipment • Seals • Sporting Goods
RoHS Compliance	• RoHS Compliant		
Appearance	• Blue • Colors Available • Green	• Light Blue • Natural Color • Orange	• Translucent
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.900		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	129	psi	
Flow : 100% Strain	249	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1800	psi	
Flow : Break	1190	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	660	%	
Flow : Break	550	%	
Tear Strength - Across Flow ²	144	lbf/in	ASTM D624
Compression Set ³ (73°F, 22 hr)	14	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	45		
Shore A, 5 sec, Injection Molded	43		

Monprene® CP-22442 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 400	°F
Middle Temperature	360 to 400	°F
Front Temperature	360 to 400	°F
Nozzle Temperature	360 to 400	°F
Processing (Melt) Temp	360 to 400	°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.	340 to 380	°F
Cylinder Zone 2 Temp.	340 to 380	°F
Cylinder Zone 3 Temp.	340 to 380	°F
Cylinder Zone 4 Temp.	340 to 380	°F
Cylinder Zone 5 Temp.	340 to 380	°F
Die Temperature	340 to 380	°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