+135-3858-6433 (GuangDong)
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TEKNOR APEX

Monprene® CP-13022D

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-13022D is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-13022D is a low density, high hardness grade that exhibits good abrasion resistance and is suitable for both injection molding and extrusion.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Chemical Resistant • Good Adhesion	• Good Colorability • Good Impact Resistance • Good Moldability	• High Hardness • Low Density • Low Specific Gravity
Uses	• Consumer Applications • Cosmetics • Flexible Grips	• Gaskets • Handles • Rubber Replacement	• Toys • 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	0.900		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	12	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2]			ASTM D412
Across Flow : 100% Strain	618	psi	
Flow : 100% Strain	686	psi	
Tensile Stress [2]			ASTM D412
Across Flow : 300% Strain	670	psi	
Flow : 300% Strain	811	psi	
Tensile Strength [2]			ASTM D412
Across Flow : Break	1170	psi	
Flow : Break	1070	psi	
Tensile Elongation [2]			ASTM D412
Across Flow : Break	770	%	
Flow : Break	560	%	
Tear Strength [2]			ASTM D624
Across Flow	302	lbf/in	
Flow	311	lbf/in	
Compression Set [3]			ASTM D395B
73°F, 22 hr	34	%	
158°F, 22 hr	85	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore D, 1 sec, Injection Molded	26		
Shore D, 5 sec, Injection Molded	23		

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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