



Monprene® CP-37180

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-37180 is a general purpose thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-37180 is a lubricated, high hardness grade suitable for both injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Filled • Good Colorability • Good Mold Release	• Good Moldability • Good Processability • High Density • High Hardness	• High Specific Gravity • Lubricated • Medium Flow • Slip
Uses	• Bonding • Consumer Applications	• Flexible Grips • Gaskets	• Handles • Seals
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.14		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	16	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	467	psi	
Flow : 100% Strain	606	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	467	psi	
Flow : 300% Strain	745	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1640	psi	
Flow : Break	1420	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	760	%	
Flow : Break	680	%	
Tear Strength ²			ASTM D624
Across Flow	221	lbf/in	
Flow	236	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	36	%	
158°F, 22 hr	63	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	82		
Shore A, 5 sec, Injection Molded	80		

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Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	420 to 460	°F
Middle Temperature	420 to 460	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	420 to 460	°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.	400 to 440	°F
Cylinder Zone 2 Temp.	400 to 440	°F
Cylinder Zone 3 Temp.	400 to 440	°F
Cylinder Zone 4 Temp.	400 to 440	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°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		