



Monprene® CP-39972 XRD4 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-39972 CLR is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-39972 CLR is a medium hardness grade that exhibits excellent sunlight resistance and is suitable for injection molding and extrusion.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Contact Clarity • Light Stabilized • Low Density	• Low Specific Gravity • Medium Flow • Medium Hardness	• Without Fillers
Uses	• Consumer Applications • Gaskets	• Handles • Tubing	
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.880		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	10	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	610	psi	
Flow : 100% Strain	893	psi	
Tensile Stress - Across Flow ² (300% Strain)	675	psi	ASTM D412
Tensile Strength ²			ASTM D412
Across Flow : Break	1480	psi	
Flow : Break	1060	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	> 1000	%	
Flow : Break	270	%	
Tear Strength ²			ASTM D624
Across Flow	347	lbf/in	
Flow	283	lbf/in	
Compression Set ³ (73°F, 22 hr)	36	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	74		
Shore A, 5 sec	72		

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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