



Monprene® CP-38138 XRD4 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-38138 XRD4 is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-38138 XRD4 is a low hardness, low density, clear grade that is suitable for cast film and extrusion.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Adhesion • Good Colorability • Good Flexibility • Good Melt Strength • Good Moldability	• Good Processability • Good Tear Strength • Good Toughness • Halogen Free • High Elongation	• Low Density • Low Flow • Low Hardness • Resilient
Uses	• Consumer Applications • Diaphragms • Film • Flexible Grips • General Purpose	• Grommets • Handles • Knobs • Overmolding • Plugs	• Profiles • Rubber Replacement • Seals • Soft Touch Applications • Tubing
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Cast Film	• Extrusion	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.880		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	30	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	98.0	psi	
Flow : 100% Strain	335	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	191	psi	
Flow : 300% Strain	462	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1380	psi	
Flow : Break	706	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	610	%	
Flow : Break	610	%	
Tear Strength ²			ASTM D624
Across Flow	182	lbf/in	
Flow	130	lbf/in	
Compression Set ³ (73°F, 22 hr)	17	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	40		
Shore A, 5 sec, Injection Molded	38		

Monprene® CP-38138 XRD4 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	340 to 440	°F
Middle Temperature	340 to 440	°F
Front Temperature	340 to 440	°F
Nozzle Temperature	340 to 440	°F
Processing (Melt) Temp	340 to 440	°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 440	°F
Cylinder Zone 2 Temp.	340 to 440	°F
Cylinder Zone 3 Temp.	340 to 440	°F
Cylinder Zone 4 Temp.	340 to 440	°F
Cylinder Zone 5 Temp.	340 to 440	°F
Die Temperature	340 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