



Monprene® CP-38138 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-38138 XRD1 is a general purpose thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-33138 XRD1 is a low density, low hardness grade that exhibits excellent elastic characteristics. This grade is suitable for both injection molding and extrusion.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • High Elasticity • High Elongation	• Low Density • Low Hardness • Low Specific Gravity	• Lubricated • Medium Flow • Without Fillers
Uses	• Consumer Applications • Film • Gaskets	• Handles • Knobs • Rubber Replacement	• Safety Equipment
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.880		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	43.0	psi	
Flow : 100% Strain	251	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	69.0	psi	
Flow : 300% Strain	286	psi	
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	> 1000	%	
Tear Strength ²			ASTM D624
Across Flow	192	lbf/in	
Flow	209	lbf/in	
Compression Set ³ (73°F, 22 hr)	11	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	40		
Shore A, 5 sec	38		

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Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	370 to 440	°F
Middle Temperature	370 to 440	°F
Front Temperature	370 to 440	°F
Nozzle Temperature	370 to 440	°F
Processing (Melt) Temp	370 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.	350 to 420	°F
Cylinder Zone 2 Temp.	350 to 420	°F
Cylinder Zone 3 Temp.	350 to 420	°F
Cylinder Zone 4 Temp.	350 to 420	°F
Cylinder Zone 5 Temp.	350 to 420	°F
Die Temperature	350 to 420	°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