



Monprene® CP-38225 XRD2 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-38225 XRD2 is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-38225 XRD2 is a low hardness, low density, clear grade that 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 • Good Adhesion • Good Processability • Low Density	• Low Hardness • Low Specific Gravity • Lubricated • Medium Flow	• Slip • Without Fillers
Uses	• Consumer Applications • Gaskets • Handles	• Knobs • Rubber Replacement • Sporting Goods	• Writing Instruments
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) (190°C/2.16 kg)	13	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	87.0	psi	
Flow : 100% Strain	106	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	194	psi	
Flow : 300% Strain	262	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1020	psi	
Flow : Break	1000	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	560	%	
Flow : Break	520	%	
Tear Strength ²			ASTM D624
Across Flow	133	lbf/in	
Flow	121	lbf/in	
Compression Set ³ (73°F, 22 hr)	19	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	28		
Shore A, 5 sec, Injection Molded	25		

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Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	340 to 400	°F
Middle Temperature	340 to 400	°F
Front Temperature	340 to 400	°F
Nozzle Temperature	340 to 400	°F
Processing (Melt) Temp	340 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.	320 to 380	°F
Cylinder Zone 2 Temp.	320 to 380	°F
Cylinder Zone 3 Temp.	320 to 380	°F
Cylinder Zone 4 Temp.	320 to 380	°F
Cylinder Zone 5 Temp.	320 to 380	°F
Die Temperature	320 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