



Monprene® MP-1736T XRD (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene MP-1736T is a general purpose thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene MP-1736T is a low density, low hardness grade that is suitable for 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 Flexibility • Good Processability	• High Flow • Light Stabilized • Low Density • Low Hardness	• Low Specific Gravity • Sunlight Resistant • Weather Resistant • Without Fillers
Uses	• Consumer Applications • Flexible Grips • Gaskets • General Purpose	• Grommets • Handles • Plugs • Rubber Replacement	• Soft Touch Applications • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
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)	45	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	72.0	psi	
Flow : 100% Strain	117	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	142	psi	
Flow : 300% Strain	187	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	560	psi	
Flow : Break	406	psi	
Tensile Elongation ²			ASTM D412
Break	670	%	
Flow : Break	790	%	
Tear Strength ²			ASTM D624
Across Flow	100	lbf/in	
Flow	69.0	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	23		
Shore A, 5 sec, Injection Molded	20		

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Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°F
Mold Temperature	95 to 120	°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.	360 to 450	°F
Cylinder Zone 2 Temp.	370 to 460	°F
Cylinder Zone 3 Temp.	380 to 470	°F
Cylinder Zone 4 Temp.	380 to 470	°F
Cylinder Zone 5 Temp.	390 to 480	°F
Die Temperature	390 to 480	°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