



Monprene® IN-22222

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene IN-22222 is a general purpose thermoplastic elastomer, available in NAT and colors, designed for a variety of industrial applications, including seals and gaskets. Monprene IN-22222 is a low density, low hardness, halogen free grade that is suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Chemical Resistant • Foamable • Good Adhesion • Good Colorability	• Good Moldability • Good Processability • Good Processing Stability • Halogen Free • High Elongation	• High Flow • Low Density • Low Hardness • Low Specific Gravity • Without Fillers
Uses	• Foam • Gaskets • Handles • Hose	• Industrial Applications • Low Temperature Applications • Pipe Seals • Profiles	• Rubber Replacement • Seals • Tubing • Windows & Doors
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.870		ASTM D792
Melt Mass-Flow Rate (MFR) (175°C/2.16 kg)	70	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	75.0	psi	
Flow : 100% Strain	83.0	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	150	psi	
Flow : 300% Strain	176	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	487	psi	
Flow : Break	447	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	800	%	
Flow : Break	700	%	
Tear Strength ²			ASTM D624
Across Flow	81.0	lbf/in	
Flow	68.0	lbf/in	
Compression Set ³ (73°F, 22 hr)	31	%	ASTM D395B

Monprene® IN-22222

Teknor Apex Company - Thermoplastic Elastomer

Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	23		
Shore A, 5 sec, Injection Molded	22		

Processing Information

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