



# Monprene® MP-1900-1000 NAT (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Monprene MP-1900-1000 is a general purpose thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene MP-1900-1000 is a low hardness grade suitable for injection molding and extrusion.

### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Flow • Low Density	• Low Hardness • Low Specific Gravity	• Without Fillers
Uses	• Consumer Applications • Gaskets	• Handles • Safety Equipment	• Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.862		ASTM D792
Melt Mass-Flow Rate (MFR) (125°C/2.16 kg)	8.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup> (100% Strain)	14.5	psi	ASTM D412
Tensile Strength <sup>2</sup> (Break)	145	psi	ASTM D412
Tensile Elongation <sup>2</sup> (Break)	> 600	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	7		
Shore OO, 1 sec, Injection Molded	50		
Shore OO, 5 sec, Injection Molded	48		

## Processing Information

Injection	Nominal Value	Unit
Rear Temperature	300 to 360	°F
Middle Temperature	300 to 410	°F
Front Temperature	300 to 446	°F
Nozzle Temperature	300 to 446	°F
Processing (Melt) Temp	338 to 446	°F
Mold Temperature	60 to 90	°F

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Injection	Nominal Value	Unit
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.	280 to 340	°F
Cylinder Zone 2 Temp.	280 to 340	°F
Cylinder Zone 3 Temp.	280 to 340	°F
Cylinder Zone 4 Temp.	280 to 340	°F
Cylinder Zone 5 Temp.	280 to 340	°F
Die Temperature	280 to 340	°F

### Extrusion Notes

Screw Speed: 30 to 100 rpm

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 20 in/min