



# Monprene® SP-14986 XRD1 PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Monprene SP-14986 XRD1 is a general purpose thermoplastic elastomer designed for a variety of consumer product applications, including sports and recreation applications, requiring a soft, rubber-like feel. Monprene SP-14986 XRD1 is a low density, high hardness, lubricated grade that exhibits a high flow. This grade is suitable for injection molding.

### General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Good Colorability • Good Flexibility • Good Flow	• Good Tear Strength • Good Toughness • High Hardness • Low Density	• Sunlight Resistant • UV Resistant
Uses	• Rubber Replacement • Sporting Goods	• Swimming Pools • Water Sports Equipment	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.892		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup>			ASTM D412
Across Flow : 100% Strain	1020	psi	
Flow : 100% Strain	910	psi	
Tensile Stress <sup>2</sup>			ASTM D412
Across Flow : 300% Strain	1240	psi	
Flow : 300% Strain	1120	psi	
Tensile Strength <sup>2</sup>			ASTM D412
Across Flow : Break	2750	psi	
Flow : Break	2500	psi	
Tensile Elongation <sup>2</sup>			ASTM D412
Across Flow : Break	640	%	
Flow : Break	680	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	88		
Shore A, 5 sec, Injection Molded	86		
Flammability	Nominal Value	Unit	Test Method
Oxygen Index	20	%	ASTM D2863

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**Processing Information**

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<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Rear Temperature	380 to 420	°F
Middle Temperature	380 to 420	°F
Front Temperature	380 to 420	°F
Nozzle Temperature	380 to 420	°F
Processing (Melt) Temp	380 to 420	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 50.0	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 1.00	in

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**Injection Notes**

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Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

**Notes**

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

<sup>2</sup> Die C, 20 in/min

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