



# Monprene® PC-913244 NAT XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Monprene PC-913244 NAT XRD1 is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel, including toothbrush handles. Monprene PC-913244 NAT XRD1 is a low hardness, high density, RoHS compliant grade suitable for injection molding.

### General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Closures • Consumer Applications • Gaskets • Handles	• Kitchenware • Medical/Healthcare Applications • Packaging • Safety Equipment	• Sporting Goods • Toothbrush Handles • Tubing • Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Opaque	
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.10		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	55	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break)	435	psi	ASTM D412
Tensile Elongation (Break)	500	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	45		
Shore A, 5 sec	44		

## Processing Information

Injection	Nominal Value	Unit
Rear Temperature	248 to 302	°F
Middle Temperature	302 to 446	°F
Front Temperature	356 to 446	°F
Nozzle Temperature	356 to 446	°F
Processing (Melt) Temp	356 to 446	°F
Mold Temperature	50 to 122	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Injection	Nominal Value	Unit
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).

### Notes

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