



Monprene® PC-913233 NAT XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene PC-913233 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-913233 NAT XRD1 is a low hardness, low 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	• Translucent	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.882		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	30	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break)	580	psi	ASTM D412
Tensile Elongation (Break)	500	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	35		
Shore A, 5 sec	33		

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

¹ Typical properties: these are not to be construed as specifications.