



Monprene® CP-28143 NAT XRD3 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene CP-28143 XRD3 is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-28143 XRD3 is a medium hardness, low density grade that is available in Nat or Blk and although designed for extrusion is also suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Colorability • Good Melt Strength • Good Mold Release • Good Moldability	• Good Processability • Low Density • Low Flow • Low Specific Gravity	• Lubricated • Medium Hardness • Without Fillers
Uses	• Consumer Applications • Gaskets	• Handles • Tubing	• Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.892		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.1	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break)	870	psi	ASTM D412
Tensile Elongation (Break)	600	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	40		
Shore A, 5 sec, Injection Molded	39		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	420 to 460	°F
Middle Temperature	420 to 460	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	420 to 460	°F
Mold Temperature	60 to 90	°F

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Injection	Nominal Value	Unit
Injection Pressure	200 to 800	psi
Injection Rate	Moderate-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.	400 to 440	°F
Cylinder Zone 2 Temp.	400 to 440	°F
Cylinder Zone 3 Temp.	400 to 440	°F
Cylinder Zone 4 Temp.	400 to 440	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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