



Monprene® PC-17142 NAT XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene PC-17142 XRD1, available in NAT and colors, is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene PC-17142 XRD1 is a high density, low hardness grade that is suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Chemical Resistant • Filled • Good Adhesion • Good Colorability	• Good Impact Resistance • Good Moldability • Good Processability • Good Processing Stability • Good Toughness	• Halogen Free • High Density • High Flow • High Specific Gravity • Low Hardness
Uses	• Consumer Applications • Cosmetics	• Gaskets • Handles	• Personal Care • Rubber Replacement
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.26		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	60	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength ² (Break)	725	psi	ASTM D412
Tensile Elongation ² (Break)	400	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	44		
Shore A, 5 sec, Injection Molded	42		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	320 to 356	°F
Middle Temperature	347 to 374	°F
Front Temperature	374 to 428	°F
Nozzle Temperature	374 to 428	°F
Processing (Melt) Temp	374 to 446	°F
Mold Temperature	61 to 104	°F

Monprene® PC-17142 NAT XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Injection	Nominal Value	Unit
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).

Notes

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

² Die C, 20 in/min