



Monprene® MP-3020 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene MP-3020 XRD1 is a general purpose thermoplastic elastomer designed for a variety of consumer and industrial product applications requiring a soft, rubber-like feel. Monprene MP-3020 XRD1 is a medium density, high hardness grade which exhibits good flexibility and is suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Filled • Good Flexibility	• High Flexibility • High Hardness	• Medium Density
Uses	• Consumer Applications • Furniture	• General Purpose • Grommets	• Handles
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color	• Opaque	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.03		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	15	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	943	psi	ASTM D412
Tensile Strength (Break)	1120	psi	ASTM D412
Tensile Elongation (Break)	400	%	ASTM D412
Compression Set (158°F, 22 hr)	78	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore D, 1 sec, Injection Molded	33		
Shore D, 5 sec, Injection Molded	32		
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	140	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 400	°F
Middle Temperature	360 to 400	°F
Front Temperature	360 to 400	°F
Nozzle Temperature	360 to 400	°F
Processing (Melt) Temp	360 to 400	°F

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Injection	Nominal Value	Unit
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	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.