Medalist[®] MD-12140H (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Comorol

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Medalist MD-12338 XRD1 is a high performance thermoplastic elastomer designed for use in medical and healthcare applications requiring good flow and elastic properties. Medalist MD-MD-12338 XRD1 is a low density, low hardness, resilient grade, available in NAT and colors, which can be sterilized and exhibits excellent adhesion to polypropylene.

Material Status	 Preliminary Data 		
Availability	 Africa & Middle East Asia Pacific	EuropeLatin America	North America
Features	 Autoclave Sterilizable Chemical Resistant Ethylene Oxide Sterilizable Good Colorability Good Flexibility Good Moldability 	 Good Sterilizability Good Toughness Halogen Free High Flow Low Density Low Hardness 	 Low Specific Gravity Radiation (Gamma) Resistant Resilient Slip Without Fillers
Uses	 Bladders Bushings Connectors Disposable Hospital Goods Flexible Grips 	 Grommets Handles Knobs Medical/Healthcare Applications Pharmaceuticals 	 Plugs Rubber Replacement Seals
Agency Ratings	• ISO 10993 Part 5	• ISO 13485	
RoHS Compliance	RoHS Compliant		
Appearance	Colors Available	Natural Color	Translucent
Forms	Pellets		
Processing Method	 Injection Molding 		

ASTM & ISO Properties ¹				
Physical	Nominal Value	Unit	Test Method	
Specific Gravity	0.885		ASTM D792	
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	12	g/10 min	ASTM D1238	
Elastomers	Nominal Value	Unit	Test Method	
Tensile Stress ² (50% Strain)	135	psi	ASTM D412	
Tensile Stress ² (100% Strain)	175	psi	ASTM D412	
Tensile Stress ² (300% Strain)	290	psi	ASTM D412	
Tensile Strength ² (Break)	690	psi	ASTM D412	
Tensile Elongation ² (Break)	710	%	ASTM D412	
Tear Strength ²	108	lbf/in	ASTM D624	
Compression Set ³			ASTM D395	
73°F, 22 hr	19	%		
158°F, 22 hr	78	%		
Hardness	Nominal Value	Unit	Test Method	
Durometer Hardness		科技有	58958 ASTM D2240	

Shore A, 1 sec, Injection Molded

Shore A, 5 sec, Injection Molded



Revision Date: 8/23/2016

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Legal Statement

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Processing Information				
Injection	Nominal Value Unit			
Rear Temperature	320 to 350 °F			
Middle Temperature	360 to 400 °F			
Front Temperature	380 to 420 °F			
Nozzle Temperature	360 to 440 °F			
Processing (Melt) Temp	360 to 440 °F			
Mold Temperature	80 to 120 °F			
Injection Rate	Moderate-Fast			
Back Pressure	25.0 to 100 psi			
Screw Speed	50 to 100 rpm			
Cushion	0.150 to 0.500 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.

³ Type 1

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