



Medalist® MD-74357 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-74357 XRD1 is a high performance thermoplastic elastomer specifically designed for healthcare and medical applications. Medalist MD-74357 XRD1 is a medium hardness, medium density, RoHS compliant grade that can be sterilized and is suitable for extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Bondability • Chemical Resistant • Good Colorability	• Good Flexibility • Good Flow • Good Impact Resistance • Good Scratch Resistance	• Good Sterilizability • Halogen Free • Medium Density • Medium Hardness
Uses	• Medical/Healthcare Applications • Soft Touch Applications		
Agency Ratings	• ISO 10993 Part 5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.00		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 ² (100% Strain)	270	psi	ASTM D412
Tensile Stress ² (300% Strain)	510	psi	ASTM D412
Tensile Strength ² (Break)	1400	psi	ASTM D412
Tensile Elongation ² (Break)	660	%	ASTM D412
Tear Strength ²	215	lbf/in	ASTM D624
Compression Set ³			ASTM D395B
73°F, 22 hr	65	%	
158°F, 22 hr	91	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	68		
Shore A, 5 sec, Injection Molded	58		

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Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	330 to 350	°F
Cylinder Zone 2 Temp.	340 to 360	°F
Cylinder Zone 3 Temp.	350 to 380	°F
Cylinder Zone 4 Temp.	360 to 390	°F
Cylinder Zone 5 Temp.	380 to 400	°F
Die Temperature	380 to 410	°F

Extrusion Notes

Dry the pellets at 80 °C for 2-4 hours.

Notes

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

² Die C, 20 in/min

³ Type 1