Medalist® MD-36950 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Wednesday, April 1, 2026

General Information

Product Description

Medalist MD-36950 XRD1 is a high performance thermoplastic elastomer specifically designed for overmolding and multi-shot molding applications in the healthcare/medical segment. Medalist MD-36950 XRD1 is a low hardness, medium density, RoHS compliant sterilizable grade that bonds to COPE, PBT, ABS, PC/ABS, PC, PMMA, PBT and POM.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Bondability • Chemical Resistant • Conformable • Crack Resistant • E-beam Sterilizable	• Good Colorability • Good Flexibility • Good Flow • Good Impact Resistance • Good Moldability • Good Scratch Resistance	• Good Toughness • Halogen Free • Low Hardness • Medium Density
Uses	• Bonding • Gaskets	• Medical/Healthcare Applications • Overmolding	• Soft Touch Applications
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding	• Multi Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.14		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	1.5	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2] (50% Strain)	160	psi	ASTM D412
Tensile Stress [2] (100% Strain)	220	psi	ASTM D412
Tensile Strength [2] (Break)	500	psi	ASTM D412
Tensile Elongation [2] (Break)	550	%	ASTM D412
Tear Strength [2]	160	lbf/in	ASTM D624
Compression Set			ASTM D395
73°F, 22 hr	13	%	
158°F, 22 hr	50	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	53		
Shore A, 5 sec, Injection Molded	50		
Additional Information	**Nominal Value**	**Unit**	
Adhesion to ABS			
Adhesion to PBT			
Adhesion to PC			
Adhesion to PC/ABS			
Adhesion to PMMA			

Revision Date: 7/24/2019

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Adhesion to COPE
Adhesion to POM

Legal Statement

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	380 to 450	°F
Middle Temperature	392 to 482	°F
Front Temperature	428 to 500	°F
Nozzle Temperature	428 to 500	°F
Processing (Melt) Temp	428 to 500	°F
Mold Temperature	90 to 130	°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 strongly suggested to enhance bondability

Notes

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

[2] Die C, 20 in/min

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