



Medalist® MD-34940

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Medalist MD-34940 is a high performance thermoplastic elastomer specifically designed for overmolding and multi-shot molding applications in the healthcare/medical segment. Medalist MD-34940 is a low hardness, low density, RoHS compliant sterilizable grade that bonds well to PC, ABS, PC/ABS, COPE, PET, PBT, PMMA, ASA, SAN, 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 Density • Low Hardness
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	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.942		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.60	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (50% Strain)	125	psi	ASTM D412
Tensile Stress ² (100% Strain)	170	psi	ASTM D412
Tensile Strength ² (Break)	800	psi	ASTM D412
Tensile Elongation ² (Break)	660	%	ASTM D412
Compression Set			ASTM D395
73°F, 22 hr	10	%	
158°F, 22 hr	57	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	42		
Shore A, 5 sec, Injection Molded	40		
Additional Information	Nominal Value	Unit	
Adhesion to ABS			
Adhesion to PBT			
Adhesion to PC			
Adhesion to PC/ABS			
Adhesion to COPE			

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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