

Medalist[®] MD-34950

Teknor Apex Company - Thermoplastic Elastomer

Wednesday, March 16, 2022

General Information

Product Description

Medalist MD-34950 is a high performance thermoplastic elastomer specifically designed for overmolding and multi-shot molding applications in the healthcare/medical segment. Medalist MD-34950 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	EuropeLatin America	North America
Features	 Abrasion Resistant Bondability Chemical Resistant Conformable Crack Resistant E-beam Sterilizable 	 Ethylene Oxide Sterilizable Good Colorability Good Flexibility Good Flow Good Impact Resistance Good Moldability 	 Good Scratch Resistance Good Toughness Halogen Free Low Density Low Hardness Radiation Sterilizable
Uses	BondingGaskets	Medical/Healthcare ApplicatioOvermolding	 Soft Touch Applications
Agency Ratings	• ISO 10993 Part 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/5.0 kg)	13	g/10 min	ASTM D1238		
Elastomers	Nominal Value	Unit	Test Method		
Tensile Stress ² (50% Strain)	165	psi	ASTM D412		
Tensile Stress ² (100% Strain)	225	psi	ASTM D412		
Tensile Stress ² (300% Strain)	440	psi	ASTM D412		
Tensile Strength ² (Break)	1100	psi	ASTM D412		
Tensile Elongation ² (Break)	590	%	ASTM D412		
Tear Strength ²	170	lbf/in	ASTM D624		
Compression Set			ASTM D395		
73°F, 22 hr	11	%			
158°F, 22 hr	46	%			
Hardness	Nominal Value	Unit	Test Method		
Durometer Hardness			ASTM D2240		
Shore A, 1 sec, Injection Molded	50				
Shore A, 5 sec, Injection Molded	48				
Additional Information	Nominal Value	Unit			
Adhesion to ABS					
Adhesion to PBT					
Adhesion to PC					
Adhesion to PC/ABS					
Adhesion to PMMA					

Revision Date: 6/1/2021

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchasers assume all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or by others. There is no warranty of merchantability and there are no other warranties for the products described.

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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 Rate	Fast			
Back Pressure	150 to 250	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

Teknor Apex Company Teknor Apex B.V. Teknor Apex (Suzhou) Advanced Polymer Teknor Apex Asia Pacific PTE. LTD. **Corporate Headquarters** Compounds Co. Pte. Ltd. In U.S. for Vinvls. TPEs. Colorants. Mijnweg 1. No. 78 Ping Sheng Road 41 Shipyard Road Engineered Thermoplastics (Chem Polymer) 6167 AC Geleen, Netherlands Suzhou Industrial Park Singapore 628134 505 Central Avenue Jiangsu, China 215126 Pawtucket, Rhode Island 02861 U.S. Phone: +31 46 7020 950 Phone: (65) 6265-2544 Fax: +31 46 7020 990 Phone: (86) 512-6287-1550 Fax: (65) 6265-1821 Phone: 401-725-8000 Fax: (86) 512-6288-8371 Fax: 401-725-8095 www.teknorapex.com www.teknorapex.com Toll Free (U.S. only) 800-556-3864 tpe@teknorapex.com www.teknorapex.com infotaap@teknorapex.com infotaap@teknoapex.com www.teknorapex.com info@teknorapex.com

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