

Medalist® MD-34950

Teknor Apex Company - Thermoplastic Elastomer

Saturday, September 14, 2024

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	• Europe • Latin 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	• 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	0.940	g/cm ³	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)	1.14	MPa	ASTM D412
Tensile Stress ² (100% Strain)	1.55	MPa	ASTM D412
Tensile Stress ² (300% Strain)	3.03	MPa	ASTM D412
Tensile Strength ² (Break)	7.58	MPa	ASTM D412
Tensile Elongation ² (Break)	590	%	ASTM D412
Tear Strength ²	29.8	kN/m	ASTM D624
Compression Set			ASTM D395
23°C, 22 hr	11	%	
70°C, 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	80	°C
Drying Time	3.0 to 4.0	hr
Rear Temperature	193 to 232	°C
Middle Temperature	200 to 250	°C
Front Temperature	220 to 260	°C
Nozzle Temperature	220 to 260	°C
Processing (Melt) Temp	220 to 260	°C
Mold Temperature	32 to 54	°C
Injection Rate	Fast	
Back Pressure	1.03 to 1.72	MPa
Screw Speed	50 to 100	rpm
Cushion	3.81 to 25.4	mm

Injection Notes

Drying is strongly suggested to enhance bondability

Notes

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

² Die C, 510 mm/min

Teknor Apex Company Corporate Headquarters	Teknor Apex B.V.	Teknor Apex (Suzhou) Advanced Polymer Compounds Co. Pte. Ltd.	Teknor Apex Asia Pacific PTE. LTD.
<i>In U.S. for Vinyls, TPEs, Colorants,</i>	Brightlands Chemelot Campus Umonderbaan 22	No. 78 Ping Sheng Road	41 Shipyard Road
<i>Engineered Thermoplastics (Chem Polymer)</i>	6167 RD 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: (86) 512-6287-1550	Phone: (65) 6265-2544
	Fax: +31 46 7020 990	Fax: (86) 512-6288-8371	Fax: (65) 6265-1821
Phone: 401-725-8000	www.teknorapex.com	www.teknorapex.com	www.teknorapex.com
Fax: 401-725-8095	tpe@teknorapex.com	infotaap@teknorapex.com	infotaap@teknorapex.com
Toll Free (U.S. only) 800-556-3864			
www.teknorapex.com			
info@teknorapex.com			

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