

Medalist® MD-12170H (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Friday, June 30, 2017

General Information

Product Description

Medalist MD-12100H series are high performance thermoplastic elastomers designed for use in medical and healthcare applications requiring high flow. Medalist MD-12170H is a low density, medium hardness, resilient grade, available in NAT and colors, which can be sterilized and exhibits excellent adhesion to polypropylene.

General			
Material Status	Preliminary Data		
Availability	 Africa & Middle East Asia Pacific	EuropeLatin America	North America
Features	 Autoclave Sterilizable Chemical Resistant Ethylene Oxide Sterilizable Good Colorability Good Flexibility Good Moldability 	 Good Sterilizability Good Toughness Halogen Free High Flow Low Density Low Specific Gravity 	Medium HardnessRadiation (Gamma) ResistantResilientSlipWithout Fillers
Uses	BladdersBushingsConnectorsDisposable Hospital GoodsFlexible Grips	 Grommets Handles Knobs Medical/Healthcare Applications Pharmaceuticals	PlugsRubber ReplacementSeals
Agency Ratings	• ISO 10993 Part 5	• ISO 13485	
RoHS Compliance	 RoHS Compliant 		
Appearance	Colors Available	Natural Color	Translucent
Forms	• Pellets		
Processing Method	 Injection Molding 		

ASTM & ISO Properties ¹				
Physical	Nominal Value	Unit	Test Method	
Specific Gravity	0.887		ASTM D792	
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	17	g/10 min	ASTM D1238	
Elastomers	Nominal Value	Unit	Test Method	
Tensile Stress ² (50% Strain)	395	psi	ASTM D412	
Tensile Stress ² (100% Strain)	455	psi	ASTM D412	
Tensile Stress ² (300% Strain)	630	psi	ASTM D412	
Tensile Strength ² (Break)	800	psi	ASTM D412	
Tensile Elongation ² (Break)	500	%	ASTM D412	
Tear Strength - Flow ²	170	lbf/in	ASTM D624	
Compression Set ³			ASTM D395	
73°F, 22 hr	25	%		
158°F, 22 hr	80	%	小司	
Hardness	Nominal Value	Unit 1	Test Method	
Durometer Hardness	1V	科汉。	09585ASTM D2240	
Shore A, 1 sec, Injection Molded	72	法尔爱师 02	1-500	
Shore A, 5 sec, Injection Molded	Nominal Value Light APEXO TEKNOR APEXO TEKNOR APEXO TEKNOR APEXO TEKNOR APEXO	m联系电压		

teknorapex.shshsj.cc

Medalist® MD-12170H (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Legal Statement

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 purchaser assumes 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 others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.

Processing Information				
Injection	Nominal Value	Unit		
Rear Temperature	320 to 350	°F		
Middle Temperature	360 to 400	°F		
Front Temperature	380 to 420	°F		
Nozzle Temperature	360 to 440	°F		
Processing (Melt) Temp	360 to 440	°F		
Mold Temperature	80 to 120	°F		
Injection Rate	Moderate-Fast			
Back Pressure	25.0 to 100	psi		
Screw Speed	50 to 100	rpm		
Cushion	0.150 to 0.500	in		

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

Notes

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

² Die C, 20 in/min

Teknor Apex Company Corporate Headquarters

In U.S. for Vinyls, TPEs, Colorants, Engineered Thermoplastics (Chem Polymer) 505 Central Avenue Pawtucket. Rhode Island 02861 U.S.

Phone: 401-725-8000 Fax: 401-725-8095

Toll Free (U.S. only) 800-556-3864

Teknor Apex U.K. Ltd.

Tat Bank Road Oldbury, West Midlands B69 4NH England

Phone: (44) 121-665-2100 Fax: (44) 121-544-5530

etpsales@teknorapex.co.uk

info@teknorapex.com



Revision Date: 6/1/2016

³ Type 1