

Medalist® MD-12350

Teknor Apex Company - Thermoplastic Elastomer

Thursday, June 29, 2017

General Information

Product Description

This compound is intended for use in medical and healthcare applications, particularly for extruded medical tubing and injection molding applications for medical devices

for medical devices.			
General			
Material Status	Commercial: Active		
Availability	 Africa & Middle East Asia Pacific	EuropeLatin America	North America
Features	Autoclave SterilizableEthylene Oxide SterilizableGood Processability	High PurityKink ResistantNo Animal Derived Comp	 Radiation (Gamma) Resistan ponents
Uses	 Medical/Healthcare Application 	ons • Pharmaceuticals	 Safety Equipment
Agency Ratings	 ISO 10993 Part 5 	• ISO 13485	
RoHS Compliance	 RoHS Compliant 		
Appearance	 Translucent 		
Forms	• Pellets		
Processing Method	Extrusion	Injection Molding	

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Specific Gravity	0.890		ASTM D792		
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	1.0	g/10 min	ASTM D1238		
Elastomers	Nominal Value	Unit	Test Method		
Tensile Stress (50% Strain)	175	psi	ASTM D412		
Tensile Stress (100% Strain)	230	psi	ASTM D412		
Tensile Stress (300% Strain)	520	psi	ASTM D412		
Tensile Strength (Break)	1880	psi	ASTM D412		
Tensile Elongation (Break)	690	%	ASTM D412		
Tear Strength	205	lbf/in	ASTM D624		
Compression Set			ASTM D395		
73°F, 22 hr	17	%			
158°F, 22 hr	87	%			
Hardness	Nominal Value	Unit	Test Method		
Durometer Hardness			ASTM D2240		
Shore A, 1 sec	53				
Shore A, 5 sec	50				

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 300 to 340 °F

Revision Date: 6/1/2016

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Injection	Nominal Value	Unit
Middle Temperature	340 to 380	°F
Front Temperature	380 to 440	°F
Nozzle Temperature	380 to 440	°F
Processing (Melt) Temp	380 to 440	°F
Mold Temperature	70 to 125	°F
Back Pressure	50.0 to 150	psi
Screw Speed	50 to 100	rpm
Cushion	0.140 to 1.00	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).

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	340 to 370	°F
Cylinder Zone 2 Temp.	360 to 385	°F
Cylinder Zone 3 Temp.	365 to 400	°F
Cylinder Zone 4 Temp.	365 to 440	°F
Cylinder Zone 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F
Die Temperature	400 to 440	<u> </u>

Extrusion Notes

Screw Speed: 30 to 100 rpm

Screen Pack Recommendation: 60/200/200/60 to 60/200/400/400/200/60 mesh size

Notes

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

Teknor Apex Company Corporate Headquarters

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