Medalist® MD-16376 X (PRELIMINARY DATA)

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. This is a specialty grade designed for improved solvent bonding.

General			
Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Bondability • Ethylene Oxide Sterilizable	• Good Processing Stability • High Clarity • High Purity	• Kink Resistant • Radiation (Gamma) Resistant
Uses	• Medical Devices • Medical/Healthcare Applications	• Safety Equipment • Seats	
Agency Ratings	• ISO 10993 Part 5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.980		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (50% Strain)	580	psi	ASTM D412
Tensile Stress (100% Strain)	600	psi	ASTM D412
Tensile Stress (300% Strain)	955	psi	ASTM D412
Tensile Strength (Break)	2790	psi	ASTM D412
Tensile Elongation (Break)	540	%	ASTM D412
Tear Strength	267	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	61	%	ASTM D395
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 1 sec	78		
Shore A, 5 sec	76		

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
Middle Temperature	340 to 380	°F
Front Temperature	380 to 440	°F

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Injection	Nominal Value	Unit
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 5 Temp.	400 to 440	°F
Die Temperature	400 to 440	°F

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

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

info@teknorapex.com

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

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