

Medalist® MD-16155HH

Teknor Apex Company - Thermoplastic Elastomer

Saturday, September 14, 2024

General Information

Product Description

Medalist® MD-16155HH is a high performance thermoplastic elastomer (TPE) intended for use in medical and healthcare applications. Medalist® MD-16155HH is a medium density, medium hardness, sterilizable grade with good compression set, and high heat resistance that is suitable for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Chemical Resistant • Ethylene Oxide Sterilizable • Excellent Elastic Recovery • Good Adhesion	• Good Flow • Good Moldability • Good Sterilizability • Halogen Free • Low Compression Set	• Medium Density • Medium Hardness • Radiation (Gamma) Resistant
Uses	• Gaskets • Hospital Goods • Medical/Healthcare Applications	• Membranes • Pharmaceuticals • Plugs	• Rubber Replacement • Seals
Agency Ratings	• ISO 10993-5	• ISO 13485	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.03	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/5.0 kg)	2.5	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (100% Strain)	2.41	MPa	ASTM D412
Tensile Strength ² (Break)	6.14	MPa	ASTM D412
Tensile Elongation ² (Break)	620	%	ASTM D412
Tear Strength ²	27.5	kN/m	ASTM D624
Compression Set			
23°C, 22 hr ³	13	%	ASTM D395B
70°C, 22 hr ³	25	%	ASTM D395B
100°C, 22 hr	36	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec	59		
Shore A, 5 sec	57		

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.

Revision Date: 8/25/2020

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.

Medalist® MD-16155HH

Teknor Apex Company - Thermoplastic Elastomer

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	182 to 216	°C
Middle Temperature	193 to 227	°C
Front Temperature	204 to 249	°C
Nozzle Temperature	204 to 249	°C
Processing (Melt) Temp	204 to 249	°C
Mold Temperature	21 to 38	°C
Back Pressure	0.172 to 0.689	MPa
Screw Speed	50 to 100	rpm
Cushion	3.81 to 25.4	mm

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, 510 mm/min

³ Type 1

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> 505 Central Avenue Pawtucket, Rhode Island 02861 U.S.	6167 RD Geleen, Netherlands	Suzhou Industrial Park Jiangsu, China 215126	Singapore 628134
Phone: 401-725-8000 Fax: 401-725-8095 Toll Free (U.S. only) 800-556-3864	Phone: +31 46 7020 950 Fax: +31 46 7020 990	Phone: (86) 512-6287-1550 Fax: (86) 512-6288-8371	Phone: (65) 6265-2544 Fax: (65) 6265-1821
www.teknorapex.com info@teknorapex.com	www.teknorapex.com tpe@teknorapex.com	www.teknorapex.com infotaap@teknorapex.com	www.teknorapex.com infotaap@teknorapex.com

Revision Date: 8/25/2020

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.