

Medalist® MD-12160H (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-12160H 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 | 0.889 | | ASTM D792 | | |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 14 | g/10 min | ASTM D1238 | | |
| Elastomers | Nominal Value | Unit | Test Method | | |
| Tensile Stress ² (50% Strain) | 235 | psi | ASTM D412 | | |
| Tensile Stress ² (100% Strain) | 285 | psi | ASTM D412 | | |
| Tensile Stress ² (300% Strain) | 435 | psi | ASTM D412 | | |
| Tensile Strength ² (Break) | 760 | psi | ASTM D412 | | |
| Tensile Elongation ² (Break) | 630 | % | ASTM D412 | | |
| Tear Strength ² | 134 | lbf/in | ASTM D624 | | |
| Compression Set ³ | | | ASTM D395 | | |
| 73°F, 22 hr | | % | | | |
| 158°F, 22 hr | 78 | % | 小司 | | |
| Hardness | Nominal Value | Unit | Test Method | | |
| Durometer Hardness | | 科技 | 958 ASTM D2240 | | |
| Shore A, 1 sec, Injection Molded | 62 | 法尔爱师(07 | 21-500 | | |
| Shore A, 5 sec, Injection Molded | Nominal Value Light 62 TEKNOR APEX60 TEKNOR apex.shshsi.co | 加联系电压 | | | |
| | teknorapex | | | | |

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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

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³ Type 1