June, 2015

3M™ Aluminum Foil Tape 425

Product Description

3M™ Aluminum Foil Tape 425 combines a 3 mil nominal dead soft aluminum foil backing with a transparent acrylic adhesive.

Product Features

• Flame resistant. Meets U.L. 746C (File E 122798) and 723, Class “L” low flammability rating (File R 7311).
• 3M aluminum foil tape 425 can be certified to meet SAE-AMS-T-23397 and L-T-80C.
• Meets requirements of FAR 25.853(a).
• The very low moisture vapor transmission rate makes these tapes a good sealant.
• The acrylic adhesive, combined with the durable aluminum backing, offers ideal properties for long serviceable life in and outdoors.
• Good candidate as a maskant in electroplating of aluminum because it will not contaminate the bath.
• Aluminum backing provides excellent reflection of both heat and light.
• Best results obtained when applied to a clean, dry surface above 32°F (0°C).

IMPORTANT: These tapes are not intended for medical usage. Neither 3M nor the Food and Drug Administration have evaluated or reviewed this tape for medical application. 3M does not recommend or endorse the usage of the aluminum tape for medical application. User assumes all risk and liability whatsoever in connection with usage of product in a medical application.
3M™ Aluminum Foil Tape 425

Technical Information Note
The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Shiny silver</td>
<td></td>
</tr>
<tr>
<td>Total Tape Thickness</td>
<td>0.12 mm</td>
<td>4.6 mil</td>
</tr>
<tr>
<td>Backing Thickness</td>
<td>0.07 mm</td>
<td>2.8 mil</td>
</tr>
<tr>
<td>Backing</td>
<td>Dead soft aluminum</td>
<td></td>
</tr>
<tr>
<td>Adhesive</td>
<td>Acrylic</td>
<td></td>
</tr>
<tr>
<td>Approximate Weight</td>
<td>4.77 g/m/24 mm</td>
<td>0.013 lb/yd/in</td>
</tr>
<tr>
<td>Water Vapor Transmission Rate</td>
<td>0.77 g/m²/24 hr</td>
<td>0.05 g/100 in²/24 hr</td>
</tr>
</tbody>
</table>

Typical Performance Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Method</th>
<th>Substrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peel Adhesion</td>
<td>5.1 N/cm</td>
<td>47 oz/in</td>
<td>ASTM D3330</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>49 N/cm</td>
<td>28 lb/in</td>
<td>ASTM D3759</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>6 %</td>
<td></td>
<td>ASTM D3759</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>-54 to 149 °C</td>
<td>-65 to 300 °F</td>
<td></td>
</tr>
</tbody>
</table>
Available Sizes

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Roll Length</td>
<td>55 m</td>
</tr>
</tbody>
</table>

Handling/Application Information

Application Ideas
- Aircraft paint stripping maskant.
- Moisture barrier in "white goods" appliances.
- General purpose heat reflector and heat dissipater.
- Mechanically hold wires and cooling coils in "white goods" appliances.
- Repair tears on truck trailers and aircraft.
- Splicing of thin gauge foils.
- General purpose holding, patching, sealing applications – indoors and out.

Storage and Shelf Life
Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.
To obtain best performance, use this product within 24 months from date of manufacture.

Industry Specifications
UL 746C (File E 122798)
UL 723 Class "L" low flammability rating (File R 7311)
Can be certified to meet SAE-AMS-T-23397 and L-T-80C
FAR 25.853(a)

Trademarks
3M is a trademark of 3M Company.
3M<sup>TM</sup> Aluminum Foil Tape 425

References

1. 3m.com Product Page
   Url: http://www.3m.com/3M/en_US/company-us/all-3m-products/-/3M-Aluminum-Foil-Tape-425?
   N=5002385+32932417444&rt=rud
2. Safety Data Sheet
   Url: https://www.3m.com/3M/en_US/company-us/SDS-search/results/?
   gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=425

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to
ISO 9001 standards.

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