3M™ Light Shielding Tape 4383H-30 and 4383H-40

Product Description
3M™ Light shielding tape 4383H (Black and White) has a white PET film carrier coated with black color, and uses high performance acrylic adhesive. It features excellent initial tack and good convertability.

Features and Benefits
• Good adhesion to many kinds of materials including most plastics, glass and metals
• Excellent light insulation
• High light reflectance
• Easy converting by die-cutting
• Double sided PET liner for smooth adhesive surface

Product Construction/Material Description

<table>
<thead>
<tr>
<th>Product Number</th>
<th>3M™ Light Shielding Tape</th>
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<tbody>
<tr>
<td></td>
<td>4383H-30</td>
</tr>
<tr>
<td>Color</td>
<td>Black and White</td>
</tr>
<tr>
<td>Adhesive / Carrier Type</td>
<td>High Performance Acrylic / PET</td>
</tr>
<tr>
<td>Thickness without liner</td>
<td>0.032 mm</td>
</tr>
<tr>
<td>Liner Thickness / Type (White side)</td>
<td>0.023 mm / PET</td>
</tr>
<tr>
<td>Liner Thickness / Type (Black side)</td>
<td>0.038 mm / PET</td>
</tr>
</tbody>
</table>

Applications
• Light insulating applications in electronic devices
• General purpose indoor and outdoor joining and mounting applications
• Holding and bonding in electronic device components like BLU bonding to LCDs, BLU module bonding, or appliance bonding
Typical Physical Properties and Performance Characteristics

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

Properties of 3M™ Light Shielding Tape 4383H-30 and 4383H-40

<table>
<thead>
<tr>
<th>Product Number</th>
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<tbody>
<tr>
<td></td>
<td>4383H-30</td>
<td>4383H-40</td>
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<tr>
<td>Adhesive</td>
<td>Acrylic</td>
<td>Acrylic</td>
<td></td>
</tr>
<tr>
<td>Tape Thickness</td>
<td>0.032 mm</td>
<td>0.04 mm</td>
<td></td>
</tr>
<tr>
<td>Adhesion 30 min dwell @ RT Modified ASTM D-3330 180 degree peel 2 mil PET backing</td>
<td>oz/in</td>
<td>N/cm</td>
<td>kg/25.4mm</td>
</tr>
<tr>
<td></td>
<td>SS</td>
<td>42</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>PC</td>
<td>46</td>
<td>5.0</td>
</tr>
<tr>
<td>Adhesion 72 hrs dwell @ RT Modified ASTM D-3330 180 degree peel 2 mil PET backing</td>
<td>oz/in</td>
<td>N/cm</td>
<td>kg/25.4mm</td>
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<tr>
<td></td>
<td>SS</td>
<td>46</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>PC</td>
<td>49</td>
<td>5.4</td>
</tr>
<tr>
<td>Shear Strength at RT Modified ASTM D-3654 1000 grams (1x1&quot;)</td>
<td>10,000 minutes</td>
<td>10,000 minutes</td>
<td></td>
</tr>
<tr>
<td>Shear Strength at 70°C (158°F) Modified ASTM D-3654 500 grams (1x1&quot;)</td>
<td>10,000 minutes</td>
<td>10,000 minutes</td>
<td></td>
</tr>
<tr>
<td>Light Insulating Property</td>
<td>99.99%</td>
<td>99.99%</td>
<td></td>
</tr>
</tbody>
</table>

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and helps improve bond strength. To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.*

*Note: Carefully read and follow the manufacturer’s precautions and directions for use when using solvents. Ideal tape application temperature range is 21°C to 38°C (70°F to 100°F). Initial tape application to surfaces at temperatures below 10°C (50°F) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

*Important Note: Please consult Federal, State, and Local Regulations. State Volatile Organic Compound (VOC) regulations may prohibit the use of certain alcohol solutions or solvents. You should check with your state environmental authorities to determine whether use of a solution or solvent is restricted or prohibited.

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Environmental Performance

Humidity Resistance:
No significant reduction in bond strength is observed after exposure for 7 days at 32°C (90°F) and 90% relative humidity.

UV Resistance:
When properly applied, nameplates and decorative trim parts are not adversely affected by exposure.

Water Resistance:
Immersion in water has no appreciable effect on the bond strength. After 100 hours at room temperature, the high bond strength is maintained.

Temperature Cycling Resistance:
High bond strength is maintained after cycling four times through:
- 4 hours at 70°C (158°F)
- 4 hours at -29°C (-20°F)
- 4 hours at 22°C (73°F)

Chemical Resistance:
When properly applied, nameplate and decorative trim parts will hold securely after exposure to many chemicals including oil, mild acids and alkalis.

Storage
Store in original cartons at 21°C (70°F) and 50% relative humidity.

Shelf Life
If stored under proper conditions, these products retain their performance and properties for two years from date of manufacture.
Safety Data Sheet
Consult Safety Data Sheet before use.

Regulatory
For regulatory information about this product, contact your 3M representative.

Technical Information
The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use
Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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