Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ Aluminum Foil Tape 425, 427, 431, 439, 1402, 1404, 1406, 1410, 1417, 1449, & 1450 & 3M™ High Temperature Aluminum Foil Tape 433 & 433L & 3M™ Heavy Duty Aluminum Foil Tape 438 & Scotch(r) Foil Tape 3311 & 3326

MANUFACTURER: 3M
DIVISION: Industrial Adhesives and Tapes Division
ADDRESS: 3M Center
St. Paul, MN  55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 10/04/10
Supercedes Date: 08/27/09

Document Group: 26-6700-4

Product Use:
Specific Use: Sealing, Bundling, and Reinforcement
Intended Use: Industrial use

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Foil Backing</td>
<td>None</td>
<td>51 - 99</td>
</tr>
<tr>
<td>Acrylic, Rubber, or Silicone Adhesive</td>
<td>Trade Secret</td>
<td>1 - 49</td>
</tr>
<tr>
<td>Liner (427, 431, 433, 3311, &amp; 3326 only)</td>
<td>None</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

3M™ Aluminum Foil Tape 425, 427, 431, 439, 1402, 1404, 1406, 1410, 1417, 1449, & 1450
3M™ High Temperature Aluminum Foil Tape 433 & 433L
3M™ Heavy Duty Aluminum Foil Tape 438 & Scotch(r) Foil Tape 3311 & 3326
# SECTION 3: HAZARDS IDENTIFICATION

## 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** silver colored aluminum foil tapes with silicone, rubber, or acrylic adhesive with or without liner  
**General Physical Form:** Solid  
**Immediate health, physical, and environmental hazards:** The environmental properties of this product present a low environmental hazard. This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

## 3.2 POTENTIAL HEALTH EFFECTS

- **Eye Contact:** No health effects are expected.  
- **Skin Contact:** No health effects are expected.  
- **Inhalation:** No health effects are expected.  
- **Ingestion:** No health effects are expected.

## 3.3 POTENTIAL ENVIRONMENTAL EFFECTS

This substance does not leach metals or other RCRA (Resource Conservation and Recovery Act) listed TCLP (Toxic Characteristic Leaching Procedure) hazardous substances at concentrations that would make the product a hazardous waste.

# SECTION 4: FIRST AID MEASURES

## 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.  
**Eye Contact:** No need for first aid is anticipated.  
**Skin Contact:** No need for first aid is anticipated.  
**Inhalation:** No need for first aid is anticipated.  
**If Swallowed:** No need for first aid is anticipated.
SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

- Autoignition temperature: Not Applicable
- Flash Point: Not Applicable
- Flammable Limits - LEL: Not Applicable
- Flammable Limits - UEL: Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

- Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).
- Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions: Not applicable.
- Environmental procedures: Not applicable.
- Clean-up methods: Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2 STORAGE

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)
8.2.1 Eye/Face Protection
Avoid eye contact.

8.2.2 Skin Protection
Avoid prolonged or repeated skin contact.

8.2.3 Respiratory Protection
Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing
Not applicable.

8.3 EXPOSURE GUIDELINES
None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor, Color, Grade:</td>
<td>silver colored aluminum foil tapes with silicone, rubber, or acrylic adhesive with or without liner</td>
</tr>
<tr>
<td>General Physical Form:</td>
<td>Solid</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits - UEL</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Nil</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Kow - Oct/ Water partition coef</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Percent volatile</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>VOC Less H2O &amp; Exempt Solvents</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

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Stability: Stable.

Materials and Conditions to Avoid:
10.1 Conditions to avoid
None known

10.2 Materials to avoid
None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICOLOGICAL INFORMATION**

Not determined.

**CHEMICAL FATE INFORMATION**

Not determined.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Reclaim if feasible. If product can't be reclaimed, dispose of waste product in a sanitary landfill. Alternatively, incinerate the waste product in an industrial, commercial, or municipal incinerator.

Since regulations vary, consult applicable regulations or authorities before disposal.

**SECTION 14: TRANSPORT INFORMATION**
Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M’s transportation classifications are based on product formulation, packaging, 3M policies and 3M’s understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS
Contact 3M for more information.

311/312 Hazard Categories:
- Fire Hazard - No
- Pressure Hazard - No
- Reactivity Hazard - No
- Immediate Hazard - No
- Delayed Hazard - No

STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

INTERNATIONAL REGULATIONS
Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.
SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 0  Flammability: 1  Reactivity: 0  Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:
Copyright was modified.
Section 8: Skin protection phrase was modified.
Section 14: Transportation legal text was modified.
Section 9: Property description for optional properties was modified.
Section 6: Environmental procedures heading was added.
Section 6: Personal precautions heading was added.
Section 10.1 Conditions to avoid heading was added.
Section 10.2 Materials to avoid heading was added.
Section 6: Personal precautions information was added.
Section 6: Environmental procedures information was added.
Section 6: Methods for cleaning up information was added.
Section 10: Materials to avoid physical property was added.
Section 10: Conditions to avoid physical property was added.
Section 6: Clean-up methods heading was added.
Section 6: Release measures information was deleted.
Section 6: Release measures heading was deleted.
Section 10: Materials and conditions to avoid physical property was deleted.

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