Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ Comply™ Steam Indicator Tape (1201, 1222, 1223, 1255)
MANUFACTURER: 3M
DIVISION: Infection Prevention Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000

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

Issue Date: 04/12/11
Supercedes Date: 06/03/10
Document Group: 11-3029-3

Product Use: Intended Use: To hold packs and indicate conditions for steam sterilization.

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-bleached craft paper</td>
<td>None</td>
<td>35 - 40</td>
</tr>
<tr>
<td>Natural Rubber Saturant</td>
<td>Trade Secret</td>
<td>20 - 26</td>
</tr>
<tr>
<td>Natural Rubber Adhesive</td>
<td>None</td>
<td>20 - 24</td>
</tr>
<tr>
<td>BUTYLATED UREA-FORMALDEHYDE RESIN</td>
<td>68002-19-7</td>
<td>1 - 7</td>
</tr>
<tr>
<td>Acrylate Copolymer</td>
<td>None</td>
<td>2 - 4</td>
</tr>
<tr>
<td>LEAD CARBONATE HYDROXIDE</td>
<td>1319-46-6</td>
<td>&lt;= 0.7</td>
</tr>
<tr>
<td>ETHYL ALCOHOL</td>
<td>64-17-5</td>
<td>&lt;= 0.5</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Roll of Tape
Odor, Color, Grade: Printed paper or tape, white, beige or blue.
General Physical Form: Solid
Immediate health, physical, and environmental hazards: This product contains dry Natural Rubber. Contains a chemical or chemicals which can cause cancer. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.
3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**
Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

**Skin Contact:**
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

**Inhalation:**
Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Ingestion:**
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

NOTE: This product contains ethanol. There are data associating human consumption of alcoholic beverages (ethanol) with developmental toxicity. This is not an expected effect during the foreseeable use of this product.

**Carcinogenicity:**
Contains a chemical or chemicals which can cause cancer.

NOTE: This product contains ethanol. In IARC published Monograph No. 44, entitled, "Alcohol Drinking", the carcinogenicity of ethanol was determined based on chronic exposure to ethanol through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>Class Description</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ALCOHOL</td>
<td>64-17-5</td>
<td>Grp. 1: Carcinogenic to humans</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>LEAD COMPOUNDS</td>
<td>S-PB-C</td>
<td>Anticipated human carcinogen Grp. 2A: Probable human care.</td>
<td>National Toxicology Program Carcinogens</td>
</tr>
<tr>
<td>LEAD, INORGANIC COMPOUNDS</td>
<td>S-PB-I</td>
<td></td>
<td>International Agency for Research on Cancer</td>
</tr>
</tbody>
</table>

3.3 POTENTIAL ENVIRONMENTAL EFFECTS

The components labeled "Inorganic" do not biodegrade, but may be removed by other mechanisms. Tests show that the components labeled "Bioconcentrate" will bioconcentrate or accumulate in living organisms. **Statements for Lead Carbonate Hydroxide (1319-46-6) are based on data for Lead (7439-92-1).**

Inorganic: Lead Carbonate Hydroxide (1319-46-6)

Bioconcentrate: Lead Carbonate Hydroxide (1319-46-6)

Lead is very toxic to aquatic organisms (0.1 mg/L < Lowest LC50, EC50, or IC50 < 1 mg/L).

### 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:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. No need for first aid is anticipated.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms develop, get medical attention. No need for first aid is anticipated.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention. This product contains Lead and should be kept out of the reach of children. If ingested immediately consult a physician.

### SECTION 5: FIRE FIGHTING MEASURES

#### 5.1 FLAMMABLE PROPERTIES

- **Autoignition temperature:** No Data Available
- **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. See decomposition data in Section 10.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel.

#### 6.2. Environmental precautions

Dispose of collected material as soon as possible.

**Clean-up methods**

Collect as much of the spilled material as possible.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

### SECTION 7: HANDLING AND STORAGE
7.1 HANDLING
Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid skin contact with hot material. For industrial or professional use only. Do not ingest.

7.2 STORAGE
Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS
Use with appropriate local exhaust ventilation. Provide appropriate local exhaust when product is heated.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact.
The following eye protection(s) are recommended: Safety Glasses with side shields.

8.2.2 Skin Protection
Avoid skin contact. Avoid skin contact with hot material. Wear appropriate gloves, such as Nomex, when handling this material to prevent thermal burns. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

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
Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-bleached craft paper</td>
<td>ACGIH</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Semi-bleached craft paper</td>
<td>OSHA</td>
<td>TWA, respirable fraction</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Semi-bleached craft paper</td>
<td>OSHA</td>
<td>TWA, as total dust</td>
<td>15 mg/m³</td>
<td></td>
</tr>
<tr>
<td>ETHYL ALCOHOL</td>
<td>ACGIH</td>
<td>STEL</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>ETHYL ALCOHOL</td>
<td>OSHA</td>
<td>TWA</td>
<td>1900 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Roll of Tape
Odor, Color, Grade: Printed paper or tape, white, beige or blue.
General Physical Form: Solid
Autoignition temperature No Data Available
Flash Point Not Applicable
Flammable Limits(LEL) Not Applicable
Flammable Limits(UEL) Not Applicable
Boiling Point No Data Available
Density Not Applicable
Vapor Density Not Applicable
Vapor Pressure Not Applicable
Specific Gravity Not Applicable
pH Not Applicable
Melting point No Data Available
Solubility In Water Not Applicable
Evaporation rate Not Applicable
Volatile Organic Compounds Not Applicable
Kow - Oct/Water partition coef Not Applicable
Percent volatile Not Applicable
VOC Less H2O & Exempt Solvents No Data Available
Viscosity Not Applicable

SECTION 10: STABILITY AND REACTIVITY

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 or By-Products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>At Elevated Temperatures</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>Oxidation, heat or reaction</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Oxidation, heat or reaction</td>
</tr>
</tbody>
</table>

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. Formaldehyde (CAS# 50-00-0). The 1222 tape contains a formaldehyde based resin. It is known that these resins may decompose under elevated temperatures and can potentially generate formaldehyde. While sampling inside a steam autoclave, indicated small amounts of formaldehyde could be generated during a sterilization cycle, no exposure to gaseous formaldehyde is expected at normal room temperature. At temperatures greater than 30°C, estimated concentrations of formaldehyde in air during packing and off-gassing were calculated to be below 0.1 ppm. Since workplaces can vary, an exposure assessment should be conducted if the need to confirm these results for a specific workplace is identified.
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: Dispose of waste product in a permitted hazardous waste facility.
Dispose of waste consisting of only pre- and/or post-sterilization tape material in a permitted hazardous waste facility.

Additional Information: Dispose as appropriate for your waste stream in accordance with local, state and federal regulations.

EPA Hazardous Waste Number (RCRA): D008 (Lead)

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

SECTION 14: TRANSPORT INFORMATION

ID Number(s):

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

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 - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<table>
<thead>
<tr>
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<th>% by Wt</th>
</tr>
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<tbody>
<tr>
<td>LEAD CARBONATE HYDROXIDE (LEAD COMPOUNDS)</td>
<td>1319-46-6</td>
<td>&lt;= 0.7</td>
</tr>
<tr>
<td>LEAD CARBONATE HYDROXIDE (LEAD, INORGANIC COMPOUNDS)</td>
<td>1319-46-6</td>
<td>&lt;= 0.7</td>
</tr>
</tbody>
</table>
STATE REGULATIONS
Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEAD COMPOUNDS</td>
<td>S–PB–C</td>
<td>*Female reproductive toxin</td>
</tr>
<tr>
<td>LEAD COMPOUNDS</td>
<td>S–PB–C</td>
<td>*Male reproductive toxin</td>
</tr>
<tr>
<td>LEAD COMPOUNDS</td>
<td>S–PB–C</td>
<td>**Carcinogen</td>
</tr>
<tr>
<td>LEAD COMPOUNDS</td>
<td>S–PB–C</td>
<td>*Developmental Toxin</td>
</tr>
</tbody>
</table>

* WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.
** WARNING: contains a chemical which can cause cancer.

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.

Additional Information: Limits changed to comply with Canadian regulations.

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: 1  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:
Section 16: Disclaimer (second paragraph) was modified.
Section 5: Extinguishing media information was modified.
Section 5: Unusual fire and explosion hazard information was modified.
Section 7: Handling information was modified.
Section 8: Prevention of swallowing information was modified.
Section 10: Hazardous decomposition or by-products table was modified.
Section 14: Transportation legal text was modified.
Section 15: Inventories information was modified.
Section 9: Boiling point information was modified.
Section 5: Flammable limits (UE) information was modified.
Section 5: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (UEL) information was modified.
Section 2: Ingredient table was modified.
Section 8: Exposure guidelines ingredient information was modified.
Section 3: Carcinogenicity table was modified.
Section 15: California proposition 65 ingredient information was modified.
Section 6: Environmental procedures information was modified.
Section 10: Hazardous decomposition or by-products comment was added.
Section 10: Hazardous decomposition or by-products phrase was added.
Section 13: Waste disposal method information was added.
Section 10: Hazardous decomposition heading was added.
Section 12: Ecotoxicological phrase was added.
Section 12: Chemical Fate phrase was added.
Section 6: 6.2. Environmental precautions heading was added.
Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.
Section 16: Web address was added.
Section 6: Personal precautions information was added.
Section 6: Methods for cleaning up information was added.
Section 8: Hand protection information was added.
Section 1: Address was added.
Copyright was added.
Company logo was added.
Section 6: Clean-up methods heading was added.
Telephone header was added.
Company Telephone was added.
Section 1: Emergency phone information was added.
Section 1: Emergency phone information was deleted.
Company Logo was deleted.
Copyright was deleted.
Section 16: Web address heading was deleted.
Section 6: Release measures heading was deleted.
Section 1: Address line 1 was deleted.
Section 1: Address line 2 was deleted.
Section 12: Ecotoxicological information comment was deleted.
Section 12: Chemical Fate information comment was deleted.

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