Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ Blue Freeze Watch™ Indicator # 9805 (zero degrees C)
MANUFACTURER: 3M
DIVISION: Food Safety Department
ADDRESS: 3M Center
St. Paul, MN 55144-1000

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

Issue Date: 05/29/09
Supercedes Date: 11/08/06
Document Group: 07-9653-2

Product Use:
Intended Use: Temperature indicator

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-chemical assembly components</td>
<td>Unknown</td>
<td>85 - 95</td>
</tr>
<tr>
<td>Deuterium oxide</td>
<td>7789-20-0</td>
<td>1 - 20</td>
</tr>
<tr>
<td>Copper compounds</td>
<td>Mixture</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Distilled water</td>
<td>7732-18-5</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Unknown</td>
<td>&lt;= 1</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Blister/card assembly with sealed glass ampule containing blue indicator solution.
Odor, Color, Grade: Sealed glass ampule containing blue indicator solution, assembled into a blister/card assembly, no discernible odor.
General Physical Form: Liquid
Immediate health, physical, and environmental 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.

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.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

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
Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam). 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: Not applicable.
SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Contain spill. Collect as much of the spilled material as possible. Clean up residue with water. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon 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
Please see package insert for additional precautionary warnings.

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
Not applicable.

8.2.2 Skin Protection
Not applicable.

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPPER COMPOUNDS</td>
<td>ACGIH</td>
<td>TWA, as Cu dust or mist</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>COPPER COMPOUNDS</td>
<td>OSHA</td>
<td>TWA, as dust or mist</td>
<td>1 mg/m³</td>
<td>Table Z-1A</td>
</tr>
</tbody>
</table>
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Blister/card assembly with sealed glass ampule containing blue indicator solution.
Odor, Color, Grade: Sealed glass ampule containing blue indicator solution, assembled into a blister/card assembly, no discernible odor.
General Physical Form: Liquid
Autoignition temperature Not Applicable
Flash Point Not Applicable
Flammable Limits - LEL Not Applicable
Flammable Limits - UEL Not Applicable
Boiling point Approximately 212 ºF
Density Not Applicable
Vapor Density No Data Available
Vapor Pressure Not Applicable
Specific Gravity Approximately 1 [Ref Std: WATER=1]
pH Not Applicable
Melting point No Data Available
Solubility In Water Not Applicable
Evaporation rate No Data Available
Volatile Organic Compounds Not Applicable
Percent volatile Not Applicable
VOC Less H2O & Exempt Solvents Not Applicable
Viscosity Not Applicable

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong acids; Strong oxidizing agents

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>Carbon monoxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Irritant Vapors or Gases</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Oxides of Sulfur</td>
<td>Not Specified</td>
</tr>
</tbody>
</table>

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 sanitary landfill.

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

SECTION 14: TRANSPORT INFORMATION

ID Number(s):
70-0707-5457-0, 70-2007-1553-3

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

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

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper compounds (COPPER COMPOUNDS (EPCRA 313))</td>
<td>1317-40-4</td>
<td>1 - 3</td>
</tr>
</tbody>
</table>
STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
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: 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.

HMIS Hazard Classification
Health: 1  Flammability: 1  Reactivity: 0  Protection: A

Hazardous Material Identification System (HMIS(r)) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS(r) ratings are to be used with a fully implemented HMIS(r) program. HMIS(r) is a registered mark of the National Paint and Coatings Association (NPCA).

Reason for Reissue: Division ownership change

Revision Changes:
Section 1: Product name was modified.
Section 1: Division name was modified.
Copyright was modified.
Page Heading: Product name was modified.
Section 14: ID Number Heading Template 1 was added.
Section 14: ID Number(s) Template 1 was added.
Section 2: Ingredient table was added.
Section 15: EPCRA 313 information was added.
Section 15: EPCRA 313 text was added.
Section 8: Exposure guidelines ingredient information was added.

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