1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BONDERITE M-CR 1402W CHROMATE TREATMENT known as BONDERITE 1402W
IDH number: 593948

Revision Number: 001.5
Issue date: 11/21/2014

ID number: 593948
Product name: BONDERITE M-CR 1402W CHROMATE TREATMENT known as BONDERITE 1402W

1.1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BONDERITE M-CR 1402W CHROMATE TREATMENT known as BONDERITE 1402W
IDH number: 593948

Revision Number: 001.5
Issue date: 11/21/2014

ID number: 593948
Product name: BONDERITE M-CR 1402W CHROMATE TREATMENT known as BONDERITE 1402W

2. HAZARDS IDENTIFICATION

2.1. EMERGENCY OVERVIEW

DANGER: CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE CANCER.

2.2. HAZARD CLASS

<table>
<thead>
<tr>
<th>HAZARD CLASS</th>
<th>HAZARD CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIN IRRITATION</td>
<td>2</td>
</tr>
<tr>
<td>EYE IRRITATION</td>
<td>2A</td>
</tr>
<tr>
<td>SKIN SENSITIZATION</td>
<td>1</td>
</tr>
<tr>
<td>CARCINOGENICITY</td>
<td>1A</td>
</tr>
</tbody>
</table>

2.3. PICTOGRAM(S)

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves. Use personal protective equipment as required.

Response: IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.


See Section 11 for additional toxicological information.
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>CAS Number</th>
<th>Percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium III chromate</td>
<td>24613-89-6</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Chromium phosphate</td>
<td>7789-04-0</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

Skin contact: Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention. Discard any shoes or clothing items that cannot be decontaminated.

Eye contact: In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Use media appropriate for surrounding material.

Special firefighting procedures: Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual fire or explosion hazards: This product is an aqueous mixture which will not burn.

Hazardous combustion products: Irritating and toxic gases or fumes may be released during a fire.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.

Clean-up methods: Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not take internally. For industrial use only.

Storage: For safe storage, store at or above 40 °F (4.4 °C). Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Protect from freezing.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium III chromate</td>
<td>0.05 mg/m3 TWA (as Cr)</td>
<td>0.005 mg/m3 TWA</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0025 mg/m3 OSHA ACT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m3 Ceiling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium phosphate</td>
<td>None</td>
<td>1 mg/m3 PEL (as Cr)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mg/m3 PEL (as Cr)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering controls: Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

Respiratory protection: If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Eye/face protection: Wear chemical goggles; face shield (if splashing is possible).

Skin protection: Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Brown
Odor: None
Odor threshold: Not available.
pH: 2.3 - 2.5
Vapor pressure: Not determined
Boiling point/range: > 100 °C (> 212°F)
Melting point/ range: Not determined
Specific gravity: 1.11 - 1.14 at 60 °F (15.56 °C)
Vapor density: Not determined
Flash point: > 100 °C (> 212°F) calculated; Aqueous solutionNot applicable
Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Autoignition temperature: Not determined
Evaporation rate: Not available.
Solubility in water: Complete
Partition coefficient (n-octanol/water): Not determined
Partition coefficient (n-octanol/water): Not determined
VOC content: Not applicable
Viscosity: Not available.
Decomposition temperature: Not available.
10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.
Hazardous reactions: Will not occur.
Hazardous decomposition products: Oxides of phosphorus.
Incompatible materials: Avoid contact with organic materials, oils, greases, and any oxidizable materials.
Reactivity: Not available.
Conditions to avoid: Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: This product is irritating to the respiratory system.
Skin contact: Contact with broken skin may lead to formation of firmly marginated “chrome sores”. Product contains chromium, which may cause an allergic skin sensitization reaction. Massive overexposures may lead to kidney failure and death. A component in this product may be harmful or fatal if absorbed through the skin, especially if skin is damaged.
Eye contact: This product is irritating to the eyes.
Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>LD50s and LC50s</th>
<th>Immediate and Delayed Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium III chromate</td>
<td>None</td>
<td>Allergen, Irritant, Respiratory</td>
</tr>
<tr>
<td>Chromium phosphate</td>
<td>None</td>
<td>Allergen, Irritant, Metabolic, Respiratory</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium III chromate</td>
<td>Known To Be Human Carcinogen.</td>
<td>Group 1</td>
<td>Yes</td>
</tr>
<tr>
<td>Chromium phosphate</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Toxic to aquatic organisms.
13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal. This chemical contains phosphates.

Hazardous waste number: This product, if discarded, may be characterized as a RCRA corrosive waste, D002. This product contains chromium which is a hazardous waste (D007).

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

- Proper shipping name: Not regulated
- Hazard class or division: None
- Identification number: None
- Packing group: None

International Air Transportation (ICAO/IATA)

- Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Chromium(III)-chromate)
- Hazard class or division: 9
- Identification number: UN 3082
- Packing group: III

Water Transportation (IMO/IMDG)

- Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chromium(III)-chromate)
- Hazard class or division: 9
- Identification number: UN 3082
- Packing group: III
- Marine pollutant: Chromium(III)-chromate
- Exceptions: Classified per IMDG Amendment 34; Effective Jan 1, 2010.

15. REGULATORY INFORMATION

United States Regulatory Information

- TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
- TSCA 12 (b) Export Notification: Chromium III chromate (CAS# 24613-89-6).
- CERCLA/SARA Section 302 EHS: None above reporting de minimis
- CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
- CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Chromium III chromate (CAS# 24613-89-6).
- California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

- CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.
Prepared by: Jennifer Mckay, Regulatory Affairs Specialist

Issue date: 11/21/2014

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user’s responsibility to determine the suitability of Henkel’s products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel’s products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel’s products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.