Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ALODINE MAGNESIUM TREATMENT KIT
IDH number: 598970

Product type: Conversion coating
Region: United States

Company address: Henkel Corporation
Contact information:
   32100 Stephenson Highway
   Madison Heights, MI 48071
   Telephone: 248.583.9300
   For Chemical Emergency: Call CHEMTREC at 800.424.9300
   Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid
Color: Orange
Odor: None

HMIS:
   HEALTH: *3
   FLAMMABILITY: 0
   PHYSICAL HAZARD: 0

Personal Protection: See MSDS Section 8

DANGER -- CORROSIVE! CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
MAY CAUSE EYE AND SKIN BURNS.
MAY CAUSE ALLERGIC SKIN REACTION.
POSSIBLE CANCER HAZARD.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Mists, vapors or liquid may cause severe irritation or burns. Prolonged or repeated breathing may cause ulceration of nasal membranes.

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 severely irritating to the eyes and may cause irreversible damage including burns and blindness. Contact with this product may cause severe eye damage.

Ingestion: This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Existing conditions aggravated by exposure: Eye, skin and respiratory disorders. Kidney disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components | CAS NUMBER | %
-----------------------|------------|-----
Chromic acid           | 7738-94-5  | 1 - 5

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.

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Product name: ALODINE MAGNESIUM TREATMENT KIT
Skin contact: Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention. If irritation persists, repeat flushing and get 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.

Notes to physician: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>121.1 °C (249.98 °F) calculated</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammable/Explosive limits - lower</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammable/Explosive limits - upper</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Extinguishing media</td>
<td>Use media appropriate for surrounding material.</td>
</tr>
<tr>
<td>Special firefighting procedures</td>
<td>Wear full protective clothing. Wear self-contained breathing apparatus.</td>
</tr>
<tr>
<td>Unusual fire or explosion hazards</td>
<td>This product is an aqueous mixture which will not burn.</td>
</tr>
<tr>
<td>Hazardous combustion products</td>
<td>Irritating and toxic gases or fumes may be released during a fire.</td>
</tr>
</tbody>
</table>

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. Block any potential routes to water systems.

Clean-up methods: Absorb spill with inert material. Shovel material into appropriate container for disposal.

7. HANDLING AND STORAGE

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

Storage: For safe storage, store between 4.4 °C (39.9 °F) and 37.8 °C (100°F) 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.
Hazardous components | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER  
--- | --- | --- | --- | ---  
Chromic acid | 0.05 mg/m³ TWA (as Cr) | 0.1 mg/m³ Ceiling | 0.005 mg/m³ TWA (SKIN) | None | None  

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: Orange
Odor: None
Odor threshold: Not available
pH: 1.2 - 1.4
Vapor pressure: Not determined
Boiling point/range: 200 °F (93.3 °C)
Melting point/ range: Not available
Specific gravity: 1.00 - 1.03 at 15.6 °C (60.08 °F)
Vapor density: Not determined
Flash point: 121.1 °C (249.98 °F) calculated
Flammable/Explosive limits - lower: Not applicable
Flammable/Explosive limits - upper: Not applicable
Autoignition temperature: Not applicable
Evaporation rate: Not available
Solubility in water: Complete
Partition coefficient (n-octanol/water): Not determined
VOC content: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.
Hazardous reactions: Will not occur.
Hazardous decomposition products: Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.
Incompatible materials: Avoid contact with organic materials, oils, greases, and any oxidizable materials.
Conditions to avoid: None identified.

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromic acid</td>
<td>Known carcinogen.</td>
<td>Group 1</td>
<td>Yes</td>
</tr>
</tbody>
</table>

IDH number: 598970  
Product name: ALODINE MAGNESIUM TRTMENT KIT
Hazardous components | Health Effects/Target Organs
--- | ---
Chromic acid | Allergen, Blood, Human carcinogen, Central nervous system, Corrosive, Developmental, Eyes, Gastrointestinal tract, Irritant, Kidney, Liver, Mutagen, Reproductive, Respiratory

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

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

Hazardous waste number: This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002). This product contains chromium which is a hazardous waste (D007).

14. TRANSPORT INFORMATION

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

- Proper shipping name: Chromic acid solution
- Hazard class or division: 8
- Identification number: UN 1755
- Packing group: III
- DOT Reportable quantity: Chromic acid

**International Air Transportation (ICAO/IATA)**

- Proper shipping name: Chromic acid solution
- Hazard class or division: 8
- Identification number: UN 1755
- Packing group: III

**Water Transportation (IMO/IMDG)**

- Proper shipping name: CHROMIC ACID SOLUTION
- Hazard class or division: 8
- Identification number: UN 1755
- Packing group: III

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: Chromic acid (CAS# 7738-94-5).
- CERCLA/SARA Section 302 EHS: None above reporting de minimus
- CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
- CERCLA/SARA 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). Chromic acid (CAS# 7738-94-5).
- CERCLA Reportable quantity: Chromic acid (CAS# 7738-94-5) 10 lbs. (4.54 kg)
- 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 material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: John DiCerbo, Regulatory Affairs Specialist

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