



Revision Number: 004.12

Issue date: 10/22/2021

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** BONDERITE M-CR1201 AERO known as ALODINE 1201  
**Product type/use:** Conversion coating  
**Restriction of Use:** None identified  
**Company address:** Henkel Corporation  
 One Henkel Way  
 Rocky Hill, Connecticut 06067

**IDH number:** 594419  
**Item number:** 594419  
**Region:** United States  
**Contact information:**  
 Telephone: +1 (860) 571-5100  
 MEDICAL EMERGENCY Phone: Poison Control Center  
 1-877-671-4608 (toll free) or 1-303-592-1711  
 TRANSPORT EMERGENCY Phone: CHEMTREC  
 1-800-424-9300 (toll free) or 1-703-527-3887  
 Internet: www.henkelna.com

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**DANGER:** CAUSES SKIN IRRITATION.  
 MAY CAUSE AN ALLERGIC SKIN REACTION.  
 CAUSES SERIOUS EYE IRRITATION.  
 MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.  
 MAY CAUSE GENETIC DEFECTS.  
 MAY CAUSE CANCER.  
 MAY DAMAGE FERTILITY OR THE UNBORN CHILD.  
 CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

| HAZARD CLASS                                       | HAZARD CATEGORY |
|--|-----------------|
| SKIN IRRITATION                                    | 2               |
| EYE IRRITATION                                     | 2A              |
| RESPIRATORY SENSITIZATION                          | 1               |
| SKIN SENSITIZATION                                 | 1               |
| GERM CELL MUTAGENICITY                             | 1B              |
| CARCINOGENICITY                                    | 1A              |
| REPRODUCTIVE TOXICITY                              | 1B              |
| SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE | 1               |

### PICTOGRAM(S)



### Precautionary Statements

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection. In case of inadequate ventilation wear respiratory protection.

**Response:** IF ON SKIN: Wash with plenty of water. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. 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.

IDH number: 594419

Product name: BONDERITE M-CR 1201 AERO known as ALODINE 1201

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

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s) | CAS Number  | Percentage* |
|------------------------|-------------|-------------|
| Chromic acid           | 7738-94-5   | 1 - 5       |
| Ferrocyanide compound  | Proprietary | 0.1 - 1     |

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

|                            |   |
|----------------------------|---|
| <b>Inhalation:</b>         | If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist. Delayed effects possible after inhalation. Administer oxygen or artificial respiration as needed. Do not use mouth-to-mouth method if victim ingested or inhaled the substance. |
| <b>Skin contact:</b>       | Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention. Launder contaminated clothing before reuse. Discard any shoes or clothing items that cannot be decontaminated.  |
| <b>Eye contact:</b>        | Immediately flush affected eye with large amounts of gently flowing water or 0.9% sterile saline solution for at least 15 minutes. Hold eyelid wide open. Get immediate medical attention. Eye flushing should continue during transportation to a doctor.  |
| <b>Ingestion:</b>          | Get immediate medical attention. Do not induce vomiting. If individual is conscious, wash out mouth with water. Provide a glass of water to dilute the material in the stomach.   |
| <b>Symptoms:</b>           | See Section 11.   |
| <b>Notes to physician:</b> | Treat symptomatically and supportively.   |

### 5. FIRE FIGHTING MEASURES

|   |   |
|---|---|
| <b>Extinguishing media:</b>               | Use media appropriate for surrounding material.   |
| <b>Special fire fighting procedures:</b>  | Wear full protective clothing. Wear self-contained breathing apparatus.   |
| <b>Unusual fire or explosion hazards:</b> | Formation of toxic gases is possible during heating or in fires.  |
| <b>Hazardous combustion products:</b>     | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Chromium oxide. |

### 6. ACCIDENTAL RELEASE MEASURES

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

|                                   |   |
|-----------------------------------|---|
| <b>Environmental precautions:</b> | Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.   |
| <b>Clean-up methods:</b>          | 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:**

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors or mists of this product. Use only with adequate ventilation. Launder work clothes frequently. Do not store or consume food, drink, or tobacco products in areas where they may become contaminated with this material. Do not take internally. Clothing or other material wet with this product and allowed to dry may become flammable. 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.

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 Component(s) | ACGIH TLV  | OSHA PEL  | AIHA WEL | OTHER |
|------------------------|--|---|----------|-------|
| Chromic acid           | 0.0005 mg/m <sup>3</sup> STEL (as Cr(VI)) Inhalable fraction.<br>0.0002 mg/m <sup>3</sup> TWA (as Cr(VI)) Inhalable fraction.<br>0.0005 mg/m <sup>3</sup> STEL (as Cr(VI)) Inhalable fraction. (SKIN) (as Cr(VI)) Inhalable fraction. (Dermal sensitization) (Respiratory sensitization) | 0.005 mg/m <sup>3</sup> TWA<br>0.0025 mg/m <sup>3</sup> OSHA_ACT<br><br>0.1 mg/m <sup>3</sup> Ceiling | None     | None  |
| Ferrocyanide compound  | None   | None  | 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 safety glasses; chemical goggles (if splashing is possible).

**Skin protection:**

Wear impervious gloves for prolonged contact. Gloves should be tested to determine suitability for prolonged contact. Use of impervious boots is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                                       |
|--|---------------------------------------|
| Physical state:                          | Liquid                                |
| Color:                                   | Orange                                |
| Odor:                                    | None                                  |
| Odor threshold:                          | Not available.                        |
| pH:                                      | < 2                                   |
| Vapor pressure:                          | Not applicable                        |
| Boiling point/range:                     | > 100 °C (> 212°F)                    |
| Melting point/range:                     | 0 °C (32°F) calculated                |
| Specific gravity:                        | 1.00 - 1.02 at 60 °F (15.56 °C)       |
| Vapor density:                           | Not applicable                        |
| Flash point:                             | > 100 °C (> 212°F) ; Aqueous solution |
| Flammable/Explosive limits - lower:      | Not applicable                        |
| Flammable/Explosive limits - upper:      | Not applicable                        |
| Autoignition temperature:                | Not applicable                        |
| Flammability:                            | Not applicable                        |
| Evaporation rate:                        | Not applicable                        |
| Solubility in water:                     | Complete                              |
| Partition coefficient (n-octanol/water): | Not determined                        |

VOC content:  
Viscosity:  
Decomposition temperature:

Not applicable  
Not available.  
Not available.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable at normal conditions.

**Hazardous reactions:** None under normal processing.

**Hazardous decomposition products:** Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Chromium oxide.

**Incompatible materials:** This product may react with strong reducing agents. Avoid contact with organic materials, oils, greases, and any oxidizable materials. Strong bases. Metals.

**Reactivity:** Not available.

**Conditions to avoid:** Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes, Ingestion

### Potential Health Effects/Symptoms

**Inhalation:** May be harmful or fatal if inhaled. Nasal itch and soreness, perforation of the nasal septum, dental erosion, and chronic asthmatic bronchitis may result from repeated exposure. Mists or vapors may be irritating to the respiratory tract. May cause sensitization by inhalation.

**Skin contact:** A component in this product may be harmful or fatal if absorbed through the skin, especially if skin is damaged. Mists, vapors or liquid may cause severe irritation or burns. Product contains chromium, which may cause an allergic skin sensitization reaction. Contact with broken skin may lead to formation of firmly marginated "chrome sores".

**Eye contact:** This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

**Ingestion:** Harmful or fatal if swallowed. May cause burns of the mouth, throat and stomach. May also cause gastrointestinal disturbances such as nausea, vomiting, abdominal pain, and diarrhea. Ingestion of this product may cause nausea, vomiting and diarrhea.

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects   |
|------------------------|-----------------|--|
| Chromic acid           | None            | Allergen, Blood, Carcinogen, Central nervous system, Corrosive, Developmental, Eyes, Gastrointestinal, Irritant, Kidney, Liver, Mutagen, Reproductive, Respiratory |
| Ferrocyanide compound  | None            | Cellular   |

| Hazardous Component(s) | NTP Carcinogen                | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|------------------------|-------------------------------|-----------------|--|
| Chromic acid           | Known To Be Human Carcinogen. | Group 1         | Yes                                      |
| Ferrocyanide compound  | No                            | No              | No                                       |

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Do not empty into drains / surface water / ground water.

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### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

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

### 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: RQ, Environmentally hazardous substance, liquid, n.o.s.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III  
DOT Hazardous Substance(s): Chronic acid

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

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

#### Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

TSCA 12 (b) Export Notification: Chronic acid (CAS# 7738-94-5).

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). Chronic acid (CAS# 7738-94-5).

CERCLA Reportable quantity: Chronic 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. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

#### Canada Regulatory Information

CEPA DSL/NDL 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: Regulatory Affairs

Issue date: 10/22/2021

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