



Revision Number: 005.2

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** BONDERITE M-CR 1600 AERO known as ALODINE 1600  
**Product type:** Conversion coating  
**Restriction of Use:** None identified  
**Company address:** Henkel Corporation  
One Henkel Way  
Rocky Hill, Connecticut 06067

**IDH number:** 1006652

**Region:** United States  
**Contact information:**  
Telephone: (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:** FATAL IF SWALLOWED OR IF INHALED.  
HARMFUL IN CONTACT WITH SKIN.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.  
MAY CAUSE RESPIRATORY IRRITATION.  
MAY CAUSE DROWSINESS OR DIZZINESS.  
MAY CAUSE CANCER.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY ORAL	2
ACUTE TOXICITY INHALATION	1
ACUTE TOXICITY DERMAL	4
EYE IRRITATION	2A
SKIN SENSITIZATION	1
CARCINOGENICITY	1A
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

**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 thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves and clothing. Use personal protective equipment as required. [In case of inadequate ventilation] wear respiratory protection.

**Response:** IF SWALLOWED: Immediately call a physician or poison control center. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
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.

**Storage:**  
**Disposal:**

Immediately call a poison control center or physician. Rinse mouth. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed. Store locked up. 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*
Sodium bichromate	7789-12-0	60 - 100

\* Exact percentage is a 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.
<b>Skin contact:</b>	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.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
<b>Hazardous combustion products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### 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 personal protective equipment. Do not allow product to enter sewer or waterways.
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**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:**

Avoid contact with eyes, skin and clothing. Avoid breathing mists or aerosols of this product. Wash thoroughly after handling. For industrial use only. Do not take internally.

**Storage:**

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Thaw and mix thoroughly if frozen.

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 WEEL	OTHER
Sodium bichromate	0.05 mg/m3 TWA (as Cr)	0.005 mg/m3 TWA 0.0025 mg/m3 OSHA ACT 1 mg/m3 PEL (as Cr) 0.1 mg/m3 Ceiling	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-red
Odor:	None
Odor threshold:	Not available.
pH:	4.7
Vapor pressure:	Not determined
Boiling point/range:	> 100 °C (> 212°F) calculated
Melting point/ range:	Not determined
Specific gravity:	1.670 - 1.770
Vapor density:	Not determined
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not applicable
Viscosity:	Not available.
Decomposition temperature:	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Incompatible materials:</b>	This product may react with strong acids, bases and oxidizing agents.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Keep away from heat, ignition sources and incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

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

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	Inhalation of vapors may cause moderate to severe respiratory tract irritation. May be harmful or fatal if inhaled.
<b>Skin contact:</b>	This product is severely irritating to the skin. Product contains chromium, which may cause an allergic skin sensitization reaction. Massive overexposures may lead to kidney failure and death.
<b>Eye contact:</b>	This product is severely irritating to the eyes.
<b>Ingestion:</b>	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Sodium bichromate	None	Irritant, Respiratory, Central nervous system, Allergen, Liver, Kidney, Developmental, Reproductive, Corrosive, Blood, Carcinogen, Mutagen, Eyes, Gastrointestinal, Lung, Cardiac

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Sodium bichromate	No	No	Yes

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Toxic to aquatic organisms

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Dispose of according to Federal, State and local governmental regulations.

**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

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:** Toxic liquid, inorganic, n.o.s. (Sodium dichromate)  
**Hazard class or division:** 6.1  
**Identification number:** UN 3287  
**Packing group:** III  
**DOT Hazardous Substance(s):** Sodium bichromate

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

**Proper shipping name:** Toxic liquid, inorganic, n.o.s. (Sodium dichromate)  
**Hazard class or division:** 6.1  
**Identification number:** UN 3287  
**Packing group:** III

#### Water Transportation (IMO/IMDG)

**Proper shipping name:** TOXIC LIQUID, INORGANIC, N.O.S. (Sodium dichromate)  
**Hazard class or division:** 6.1  
**Identification number:** UN 3287  
**Packing group:** III  
**Marine pollutant:** Sodium dichromate  
**Additional information:** IMDG-Code: Segregation group 1- Acids

### 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 VI compound (CAS# 10588-01-9).

**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 VI compound (CAS# 10588-01-9).

**CERCLA Reportable quantity:** Sodium bichromate (CAS# 7789-12-0) 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 Material Safety Data Sheet format.

**Prepared by:** Mark Mau, Regulatory Affairs Specialist

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