

Revision Number: 003.3

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## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	BONDERITE M-CR MAGNESIUM AERO known as ALODINE MAGNESIUM TRTMENT KIT	<b>IDH number:</b>	598970
<b>Product type:</b>	Conversion coating	<b>Region:</b>	United States
<b>Restriction of Use:</b>	None identified	<b>Contact information:</b>	
<b>Company address:</b>		Telephone:	
		Emergency Telephone:	

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

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

HAZARD CLASS	HAZARD CATEGORY
EYE IRRITATION	2A
SKIN SENSITIZATION	1
CARCINOGENICITY	1A

### PICTOGRAM(S)



### Precautionary Statements

<b>Prevention:</b>	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.
<b>Response:</b>	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. Wash contaminated clothing before reuse.
<b>Storage:</b>	Store locked up.
<b>Disposal:</b>	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*
Water	7732-18-5	60 - 100
Chromic acid	7738-94-5	1 - 5

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Gypsum (Ca(SO4).2H2O)	13397-24-5	0.1 - 1
Limestone	1317-65-3	0 - 0.1
Quartz (SiO2)	14808-60-7	0 - 0.1

\* 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>	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.
<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 firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn. Formation of toxic gases is possible during heating or in fires.
<b>Hazardous combustion products:</b>	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.

<b>Environmental precautions:</b>	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.
<b>Clean-up methods:</b>	Absorb spill with inert material. Shovel material into appropriate container for disposal.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	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.
<b>Storage:</b>	For safe storage, store between 40 °F (4.4 °C) and 100 °F (37.8 °C) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Protect from freezing.

## 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
Water	None	None	None	None
Chromic acid	0.05 mg/m <sup>3</sup> TWA (as Cr)	0.005 mg/m <sup>3</sup> TWA 0.0025 mg/m <sup>3</sup> OSHA_ACT 0.1 mg/m <sup>3</sup> Ceiling	None	None
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O)	10 mg/m <sup>3</sup> TWA Inhalable fraction.	5 mg/m <sup>3</sup> PEL Respirable fraction. 15 mg/m <sup>3</sup> PEL Total dust.	None	None
Limestone	10 mg/m <sup>3</sup> TWA Total dust.	5 mg/m <sup>3</sup> PEL Respirable fraction. 15 mg/m <sup>3</sup> PEL Total dust.	None	None
Quartz (SiO <sub>2</sub> )	0.025 mg/m <sup>3</sup> TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m <sup>3</sup> TWA Respirable. 0.3 mg/m <sup>3</sup> TWA Total dust.	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

<b>Physical state:</b>	Liquid
<b>Color:</b>	Orange
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	1.2 - 1.4
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	200 °F (93.3 °C)
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.00 - 1.03 at 15.6 °C (60.08 °F)
<b>Vapor density:</b>	Not determined
<b>Flash point:</b>	121.1 °C (249.98 °F) calculated
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Complete
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>VOC content:</b>	Not applicable
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	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>	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.
<b>Incompatible materials:</b>	Avoid contact with organic materials, oils, greases, and any oxidizable materials.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	None identified.

## 11. TOXICOLOGICAL INFORMATION

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

**Potential Health Effects/Symptoms**

<b>Inhalation:</b>	Mists, vapors or liquid may cause severe irritation or burns. Prolonged or repeated breathing may cause ulceration of nasal membranes.
<b>Skin contact:</b>	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.
<b>Eye contact:</b>	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.
<b>Ingestion:</b>	This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Water	None	No Target Organs
Chromic acid	None	Allergen, Blood, Carcinogen, Central nervous system, Corrosive, Developmental, Eyes, Gastrointestinal, Irritant, Kidney, Liver, Mutagen, Reproductive, Respiratory
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O)	None	Respiratory
Limestone	None	Nuisance dust
Quartz (SiO <sub>2</sub> )	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Water	No	No	No
Chromic acid	No	No	Yes
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O)	No	No	No
Limestone	No	No	No
Quartz (SiO <sub>2</sub> )	Known To Be Human Carcinogen.	Group 1	No

## 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

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:** Chromic acid solution  
**Hazard class or division:** 8  
**Identification number:** UN 1755  
**Packing group:** III  
**DOT Hazardous Substance(s):** 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 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). 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. 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 information added in Section(s): 1 and 9.

**Prepared by:** Regulatory Affairs

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