

Revision Number: 004.5 Issue date: 09/11/2014

1. PRODUCT AND COMPANY IDENTIFICATION

BONDERITE M-CR 1201 AERO known IDH number: Product name: 594418

as ALODINE 1201

Product type: Conversion coating

Restriction of Use: None identified

Company address: Henkel Corporation One Henkel Way

Rocky Hill, Connecticut 06067

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: MAY CAUSE AN ALLERGIC SKIN REACTION.

MAY CAUSE CANCER.

| HAZARD CLASS | HAZARD CATEGORY |
|--------------------|-----------------|
| SKIN SENSITIZATION | 1 |
| CARCINOGENICITY | 1A |

PICTOGRAM(S)



Precautionary Statements

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Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Avoid breathing vapors, mist, or spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Use personal protective

equipment as required.

IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical Response:

attention. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing

before reuse.

Storage: Store locked up

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

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. Rinse with large amounts of

running water. GET MEDICAL ATTENTION IMMEDIATELY! If iced 0.13% benzalkonium chloride (Zephiran) solution or 2.5% calcium gluconate gel are available, the rinsing may be limited to 5 minutes, with the soaks or gel applied as soon as the rinsing is stopped. If benzalkonium chloride or calcium gluconate gel is not available, rinsing must continue until medical treatment is

provided.

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 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.

Symptoms: See Section 11.

Notes to physician: Treatment of hypocalcemia associated with corrosive fluoride compounds

exposure may be corrected by intravenous calcium gluconate or calcium chloride. Treatment of hypomagnesemia may be corrected by intravenous

magnesium sulfate.

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. Do not allow product to

enter sewer or waterways.

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.

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

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of

this product. Wash thoroughly after handling. For industrial use only. Clothing or other material wet with this product and allowed to dry may become

flammable.

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. 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 |
|------------------------|---------------------------|--|-----------|-------|
| Chromic acid | 0.05 mg/m3 TWA (as Cr) | 0.005 mg/m3 TWA 0.0025 mg/m3 OSHA_ACT 0.1 mg/m3 Ceiling | None | None |
| Ferrocvanide 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

oroduct.

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: Chemical resistant, impermeable gloves. Use of impervious apron and boots

are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Color:
Orange
Odor:
None
Odor threshold:
PH:
Vapor pressure:
Not applicable
Not applicable
Not applicable

Boiling point/range: $> 100 \,^{\circ}\text{C} \, (> 212 \,^{\circ}\text{F})$ Melting point/ range: $0 \,^{\circ}\text{C} \, (32 \,^{\circ}\text{F})$ calculated

Specific gravity: 1.00 - 1.02 at 60 °F (15.56 °C)

Vapor density: Not applicable Flash point: Not applicable Flammable/Explosive limits - lower: Not applicable Flammable/Explosive limits - upper: Not applicable Not applicable Autoignition temperature: Not applicable Evaporation rate: Solubility in water: Complete Partition coefficient (n-octanol/water): Not determined **VOC** content: Not applicable Not available. Viscosity: **Decomposition temperature:** Not available.

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10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

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May liberate hydrogen fluoride. When heated to decomposition or on contact with strong acids

potassium ferric cyanide may emit fumes of cyanide.

Incompatible materials: Avoid contact with organic materials, oils, greases, and any oxidizable materials. This product

may react with strong alkalies.

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. May cause severe irritation.

Skin contact: This product is severely irritating to the skin. 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 absorbed through the skin, especially if skin is damaged.

Eye contact: Contact can cause moderate to severe irritation and possible injury to the eyes.

Ingestion: 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 | No | No | Yes |
| Ferrocyanide compound | No | No | 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: RQ, Environmentally hazardous substances, liquid, n.o.s.

Hazard class or division: 9

Identification number:UN 3082Packing group:IIIDOT Hazardous Substance(s):Chromic acid

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082

Water Transportation (IMO/IMDG)

Packing group:

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9

Identification number: UN 3082

Packing group:

Additional information: IMDG-Code: Segregation group 1- Acids

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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.

Canada Regulatory Information

IDH number: 594418

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 information added in Section(s): 1,2, 4, 5 and 9.

Prepared by: John DiCerbo, Sr. Regulatory Affairs Specialist

Issue date: 09/11/2014

IDH number: 594418

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