

Revision Number: 004.11 Issue date: 05/29/2019

1. PRODUCT AND COMPANY IDENTIFICATION

BONDERITE M-CR 1201 AERO known Product name: IDH number: 594657

as ALODINE 1201

Product type/use: Conversion coating

Restriction of Use: None identified

Company address: Henkel Corporation

One Henkel Way Rocky Hill, Connecticut 06067 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

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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 eve irritation persists: Get medical attention. Take off contaminated

clothing.

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

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

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. For skin contact, flush with large

amounts of water. Seek immediate medical attention.

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.

Symptoms: See Section 11.

Notes to physician: Treat symptomatically and supportively.

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: Formation of toxic gases is possible during heating or in fires.

Hazardous combustion products: 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.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Wear appropriate

protective equipment and clothing during clean-up.

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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 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.

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	0.0005 mg/m3 STEL (as Cr(VI)) Inhalable fraction. 0.0002 mg/m3 TWA (as Cr(VI)) Inhalable fraction. (SKIN) (as Cr(VI)) Inhalable fraction. 0.0005 mg/m3 STEL (as Cr(VI)) Inhalable fraction. (Dermal sensitization) (Respiratory sensitization)	0.005 mg/m3 TWA 0.0025 mg/m3 OSHA_ACT 0.1 mg/m3 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: Chemical resistant, impermeable gloves. Use of impervious apron and boots

are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:LiquidColor:OrangeOdor:NoneOdor threshold:Not available.

pH: < 2

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Vapor pressure:Not applicableNot applicableBoiling point/range:> 100 °C (> 212°F)Melting point/ range:0 °C (32°F) calculatedSpecific gravity:1.00 - 1.02 at 60 °F (15.56 °C)

Vapor density: Not applicable

Flash point: > 100 °C (> 212°F); Aqueous solution

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Flammable/Explosive limits - lower: Not applicable Not applicable Flammable/Explosive limits - upper: Autoignition temperature: Not applicable Flammability: Not applicable **Evaporation rate:** Not applicable 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

Stability: Stable at normal conditions.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

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Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low

molecular weight hydrocarbons.

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: Mists or vapors may be irritating to the respiratory tract. May cause sensitization by inhalation. Skin contact: This product is irritating to the skin. Contact with broken skin may lead to formation of firmly

This product is 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.

Eye contact: This product may cause irritation 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	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.

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, may be characterized as a RCRA corrosive waste,

D002. This product contains chromium which is a hazardous waste (D007). Wastes must be tested using methods described in 40 CFR Part 261 to

determine if it meets applicable definitions of hazardous wastes.

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: Identification number: UN 3082 Packing group: Ш

DOT Hazardous Substance(s): Chromic acid

International Air Transportation (ICAO/IATA)

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

Hazard class or division: Identification number: UN 3082 Packing group: Ш

Water Transportation (IMO/IMDG)

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

Hazard class or division: Identification number: UN 3082 Packing group: Ш

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.

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

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

IDH number: 594657

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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Prepared by: Regulatory Affairs

Issue date: 05/29/2019

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