



Revision Number: 002.5

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1. PRODUCT AND COMPANY IDENTIFICATION

| | | | |
|-------------------------------|--------------------------------------|--|---------------|
| Product name: | BONDERITE M-CR T5900 RTU AERO | IDH number: | 772743 |
| | known as ALODINE T 5900 RTU | | |
| Product type: | Conversion coating | Region: | United States |
| Restriction of Use: | None identified | Contact information: | |
| Company address: | | Telephone: +1 (860) 571-5100 | |
| Henkel Corporation | | MEDICAL EMERGENCY Phone: Poison Control Center | |
| One Henkel Way | | 1-877-671-4608 (toll free) or 1-303-592-1711 | |
| Rocky Hill, Connecticut 06067 | | TRANSPORT EMERGENCY Phone: CHEMTREC | |
| | | 1-800-424-9300 (toll free) or 1-703-527-3887 | |
| | | Internet: www.henkelna.com | |

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: MAY CAUSE AN ALLERGIC SKIN REACTION.

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

PICTOGRAM(S)



Precautionary Statements

| | |
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| Prevention: | Avoid breathing vapors, mist, or spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. |
| Response: | IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. |
| Storage: | Not prescribed |
| 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* |
|---------------------------------|-------------|-------------|
| Dipotassium hexafluorozirconate | 16923-95-8 | 0.1 - 1 |
| Chromium 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

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|----------------------------|---|
| 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: | Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention. |
| Eye contact: | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| 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

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| 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: | May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses. |
| 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.

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|-----------------------------------|---|
| Environmental precautions: | Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. |
| 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

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|------------------|---|
| Handling: | Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Provide adequate ventilation. Do not take internally. For industrial use only. |
| Storage: | For safe storage, store between 5 °C (41°F) and 35 °C (95°F) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Protect from freezing. |

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 |
|---------------------------------|--|--|-----------|-------|
| Dipotassium hexafluorozirconate | 5 mg/m3 TWA (as Zr) 10 mg/m3 STEL (as Zr) | 5 mg/m3 PEL (as Zr) | None | None |
| Chromium compound | 0.003 mg/m3 TWA (as Cr(III)) Inhalable fraction. 0.003 mg/m3 TWA (as Cr(III)) Inhalable fraction. (Respiratory sensitization) (Dermal sensitization) | 1 mg/m3 PEL (as Cr) 0.5 mg/m3 PEL (as Cr) | 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 for fumes which may arise from thermal processing.

Skin protection:

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

9. PHYSICAL AND CHEMICAL PROPERTIES

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|--|-----------------------------------|
| Physical state: | Liquid |
| Color: | Green |
| Odor: | Mild |
| Odor threshold: | Not available. |
| pH: | 3.8 - 4.0 |
| Vapor pressure: | Not determined |
| Boiling point/range: | > 100 °C (> 212°F)calculated |
| Melting point/ range: | Not determined |
| Specific gravity: | 1.00 - 1.02 at 22.2 °C (71.96 °F) |
| Vapor density: | Not available. |
| Flash point: | Not applicable |
| Flammable/Explosive limits - lower: | Not available. |
| Flammable/Explosive limits - upper: | Not available. |
| Autoignition temperature: | Not applicable |
| Flammability: | Not applicable |
| Evaporation rate: | Not determined |
| Solubility in water: | Complete |
| Partition coefficient (n-octanol/water): | Not available. |
| VOC content: | Not available. |
| Viscosity: | Not available. |
| Decomposition temperature: | Not available. |

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

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|----------------------|--|
| Inhalation: | This product is irritating to the respiratory system. |
| Skin contact: | This product may cause irritation to the skin. This product contains a component that may cause allergic skin reactions. |
| 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 |
|---------------------------------|------------------------------|--|
| Dipotassium hexafluorozirconate | Oral LD50 (Mouse) = 98 mg/kg | Allergen, Blood, Cardiac, Central nervous system, Corrosive, Gastrointestinal tract, Irritant, Kidney, Lung, Metabolic, Muscle, Teeth, Less weight gain and food intake. |
| Chromium compound | None | Allergen, Corrosive, Irritant, Respiratory |

| Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|---------------------------------|----------------|-----------------|---|
| Dipotassium hexafluorozirconate | No | No | No |
| Chromium 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 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: | Not regulated |
| Hazard class or division: | None |
| Identification number: | None |
| Packing group: | None |

International Air Transportation (ICAO/IATA)

| | |
|---------------------------|---------------|
| Proper shipping name: | Not regulated |
| Hazard class or division: | None |
| Identification number: | None |
| Packing group: | None |

Water Transportation (IMO/IMDG)

| | |
|---------------------------|---------------|
| Proper shipping name: | Not regulated |
| Hazard class or division: | None |
| Identification number: | None |
| Packing group: | None |

15. REGULATORY INFORMATION

United States Regulatory Information

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| 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: | None above reporting de minimis |
| CERCLA/SARA Section 302 EHS: | None above reporting de minimis. |
| CERCLA/SARA Section 311/312: | Immediate Health, Delayed Health |
| CERCLA/SARA Section 313: | None above reporting de minimis. |
| California Proposition 65: | No California Proposition 65 listed chemicals are known to be present. |

Canada Regulatory Information

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|-----------------------------|---|
| CEPA DSL/NDL Status: | All components are listed on or are exempt from listing on the Canadian Domestic Substances List. |
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16. OTHER INFORMATION

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

Prepared by: Regulatory Affairs

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