



# Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product Name: CC-1010

MSDS Revision: 0001

Description Powdered Chromated Aluminum Conversion Coatin

Revision Date: 11/29/2018

Product Number: 1963

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Aero Clean Technologies, LLC

1320 Stephenson Ave

Lynchburg, VA 24501

For More Information Call: 434-381-0699 (Monday-Friday 7:00-6:00)

In Case of Emergency Call: 765-271-0430 (24 Hours/Day, 7 Days/Week)

### WHMIS Classification / Symbol:

C : Oxidizing Material

D-1B : Toxic Material

D-2A : Materials Causing Other Toxic Effects: Very Toxic Material (> 0.1%)

E : Corrosive Material at (>1%)



Signal Word: **DANGER -- CORROSIVE!**

### Hazard Statements

H351 Suspected of causing cancer

### Precautionary Statements

P102 Keep out of reach of children.

P103 Read label before use.

P270 Do not eat, drink or smoke when using this product.

P281 Use personal protective equipment as required.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

## 2. COMPOSITION, INFORMATION ON INGREDIENTS (Not Intended As Specifications)

Description	CAS Number	Concentration
Chromium trioxide	1333-82-0	34 - 40
Sodium fluorosilicate	16893-85-9	29 - 35
Potassium Ferricyanide	13746-66-2	24 - 30
Ammonium Bifluoride	1341-49-7	0 - 1
Potassium Hexafluorozirconate	16923-95-8	0 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## 3. HAZARDS IDENTIFICATION

### Overview

Contact with this material will cause burns to the skin, eyes and mucous membranes. May cause blindness. Contact with broken skin may result in ulcers. Prolonged or repeated breathing may cause ulceration of nasal membranes. Following skin exposure to this product, the sensation of irritation or pain may be delayed. Cancer Hazard. Contains material which can cause cancer.

<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 margined "chrome sores". Product contains chromium, which may cause an allergic skin sensitization reaction. Massive overexposures may lead to kidney failure and death. Following skin exposure to this product, the sensation of irritation or pain may be delayed.
<b>Skin Absorption</b>	None noted.
<b>Eye Contact</b>	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness
<b>Ingestion</b>	This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. Ingestion of small amounts of this product may result in potentially fatal hypocalcemia and systemic toxicity.
<b>Other</b>	None noted.

#### 4. FIRST-AID MEASURES

<b>General</b>	If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a <b>POISON CONTROL CENTER, EMERGENCY ROOM, OR PHYSICIAN</b> immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.
<b>Inhalation</b>	Remove to fresh air and restore breathing if necessary. Seek medical attention.
<b>Skin Contact</b>	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation persists.
<b>Eye Contact</b>	Immediately flush eyes with water for 15 minutes while holding eyelids open for maximum irrigation. Seek medical attention.
<b>Ingestion</b>	Seek immediate medical attention. DO NOT induce vomiting unless directed by medical personnel.
<b>Physicians Note</b>	Ocular exposure to corrosive fluoride compounds has been treated with isotonic sodium chloride or magnesium chloride. Dermal exposure to corrosive fluoride compounds has been treated with calcium gluconate or calcium carbonate gel applied topically to the affected areas to relieve pain at the site of exposure. 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

Flash Point LE	Not Applicable	Flash Point UEL	Not Applicable	Auto Ignition:	Not Applicable	Boiling Point	Not Applicable
Unusual Fire or Exposure Hazards	If evaporated to dryness, solid residue is an oxidizing agent and may cause spontaneous ignition of combustible materials.						
Sensitivity to Mechanical Impact	Not expected to be sensitive to mechanical impact.						
Rate of Burning	Not determined.						
Explosive Power	Not determined.						
Sensitivity to Static Charge	Not applicable.						
Extinguishing Media	Use an extinguishing agent suitable for the surrounding fire.						
Instructions to Fire Fighters	No special instructions.						
Fire Fighting Protective Equipment	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.						

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
<b>Environmental Precautions</b>	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

## Large Spill Handling

- Stop leak without risking safety.
- Move containers from spill area.
- Approach release from upwind.
- Prevent entry into sewers, water ways, basements, or confined areas.
- Wash spillages into an effluent treatment plant. If effluent treatment plant is not available then contain and collect spillage with non-combustible, absorbent material (i.e. sand, earth, vermiculite, or diatomaceous earth) and place in container for disposal according to local regulations (see Section 13).
- Dispose of via a licensed waste disposal contractor.
- Contaminated absorbent material may pose the same hazard as the spilled product.

**Note:** see Section 1 for emergency contact information and Section 13 for waste disposal.

## Small Spill Handling

Stop leak if without risking personal or environmental well being. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 7. HANDLING AND STORAGE

### Handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chromium trioxide								
TWA	ACGIH STEL	CEILING	TWA	OSHA STEL	CEILING	TWA	NIOSH STEL	CEILING
0.05 mg/m <sup>3</sup> Cr					0.1 mg/m <sup>3</sup> CrO <sub>3</sub>	0.0002 mg/m <sup>3</sup> Cr		
Sodium fluorosilicate								
TWA	ACGIH STEL	CEILING	TWA	OSHA STEL	CEILING	TWA	NIOSH STEL	CEILING
2.5 mg/m <sup>3</sup>				2.5 mg/m <sup>3</sup>			2.5 mg/m <sup>3</sup>	
Potassium Ferricyanide								
TWA	ACGIH STEL	CEILING	TWA	OSHA STEL	CEILING	TWA	NIOSH STEL	CEILING
			5 mg/m <sup>3</sup>					
Ammonium Bifluoride								
TWA	ACGIH STEL	CEILING	TWA	OSHA STEL	CEILING	TWA	NIOSH STEL	CEILING
2.5 mg/m <sup>3</sup>				2.5 mg/m <sup>3</sup>				
Potassium Hexafluorozirconate								
TWA	ACGIH STEL	CEILING	TWA	OSHA STEL	CEILING	TWA	NIOSH STEL	CEILING
5 mg/m <sup>3</sup> (as Zr)	10 mg/m <sup>3</sup> (as Zr)		5 mg/m <sup>3</sup> (as Zr)			5 mg/m <sup>3</sup> (as Zr)		

## Personal Protective Equipment (PPE)



General PPE	Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.
Respiratory	If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator
Hands	Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly affect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: NEOPRENE and NITRILE If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.
Eyes	Chemical splash goggles or face shield should be used. Safety Glasses do not offer enough protection from spray and splashing product.
Skin and Body	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Hygiene	Wash hands, forearms, and face thoroughly after handling chemical products prior to eating, smoking, using the lavatory, and at the end of the working periods. Appropriate procedures should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid		Density:
Appearance: Powder		pH: 1.4-1.8 (1% Solution)
Color: Orange		Viscosity: Not Applicable
Odor:		Solubility in Water: Complete
Boiling Point: Not Applicable	Flash Point LEL: Not Applicable	Vapor Density: Not Applicable
Freezing Point: Not Applicable	Flash Point UEL: Not Applicable	Vapor Pressure: Not Applicable
Melting Point: Not Applicable	Auto Ignition: Not Applicable	Evaporation Rate: Not Applicable
FlashPoint: Not Applicable		VOC: Not Applicable

## 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Conditions to Avoid	Oxidizing agents
Materials to Avoid	Organic materials, oils, and strong alkalies
Decomposition	May liberate hydrogen fluoride
Polymerization	None determined

## 11. TOXICOLOGICAL INFORMATION

Chromium trioxide	
Test Method	Dosage/Concentration
LC50 (inhalation, rat)	0.217 mg/L (4 hours)
LD50 (dermal, rabbit)	55 mg/kg
LD50 (oral rat)	50 mg/kg

<b>Potassium Ferricyanide</b>	
Test Method	Dosage/Concentration
LD50 (oral, mouse)	2970 mg/kg
<b>Potassium Hexafluorozirconate</b>	
Test Method	Dosage/Concentration
LD50 (oral, mouse)	98 mg/kg
<b>Sodium fluorosilicate</b>	
Test Method	Dosage/Concentration
LD50 (oral, rabbit)	125 mg/kg
LD50 (oral rat)	125 mg/kg
LD50 (rat, skin)	70 mg/kg

## 12. ECOLOGICAL INFORMATION

## 13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environment agency for specific rules). Do not dump in sewers, any body of water, or on the ground unless it complies with local, state, and federal laws and regulation.

Empty containers retain product residue and can be dangerous. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. Do not dispose of package until thoroughly washed and rinsed out.

## 14. TRANSPORT INFORMATION

In accordance with ICAO/IATA/DOT/TDG

UN Number: UN1463

UN Proper Shipping Name CHROMIUM TRIOXIDE, ANHYDROUS

UN Class: 5.1

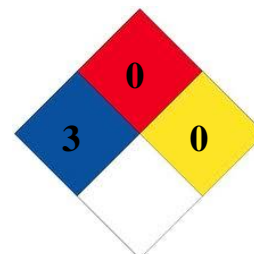
Package Group (DOT) II

## 15. REGULATORY INFORMATION

All regulatory information is stated as provided by MSDS from manufacturer/distributor.

There are no materials/ingredients listed by manufacturer/distributors that have information to report in this section.

## 16. OTHER INFORMATION



This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.