

MATERIAL SAFETY DATA SHEET

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Section I: Product Information

Identity: **CHROMITE**

CHROME ORE, CHROMITE ORE, IRON Synonyms:

CHROMITE; CHROME SAND

Trade Names: CHROMOX; ChromeCAST;

04/2014 **Revision Date:**

HMIS

Health- 2

Flammability- 0 Reactivity-0

Personal Protection:







Section II: Composition

Chemical Name: CAS# Percent Chrome Ore (Cr₂FeO₄) or Cr₂O₃ 1308-31-2 100

Section III: Health Hazard Data

| Component | CAS | % By | OSHA PEL | OSHA | ACGIH | ACGIH | Listed Carcinogen | | |
|------------|-----------|------|----------------------|---------|---------|-------|-------------------|------|------|
| | | Wt | (mg/m ³) | Ceiling | TLV | STEL | | | |
| Chrome Ore | 1308-31-2 | 100 | 1 (as Cr) | N/A | 0.05 | N/A | NTP | IARC | OSHA |
| | | | | | (as Cr) | | N | N | N |

IARC Group: Not classifiable as carcinogenic to humans

Emergency Overview: Not a fire or spill hazard. Low toxicity- Dry dust is a nuisance particulate. Generally, health effects are provided for exposure to dust that may be generated during product transfer and handling.

Primary Route of Exposure: Inhalation

EYE CONTACT: Particulate may cause slight to moderate irritation. Abrasive action of dust **Relevant Routes of Exposure:**

particulate can damage eye.

SKIN CONTACT: Prolonged or repeated contact may cause slight to moderate irritation. **INHALATION:** Overexposure by inhalation of airborne particulate, dust, or fumes is irritating to the nose, throat, and respiratory tract. Inhalation of excessive levels of dust or fumes may

INGESTION: Unlikely route of exposure; no hazard in normal industrial use. Small amounts (< tablespoonful) swallowed during normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. If ingested in sufficient quantity, may cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting, abdominal pain, and diarrhea.

Acute and Chronic effects of Exposure: Excessive, short-term exposure to airborne mineral dusts and particulate may cause upper respiratory and eye irritation. Excessive, long-term inhalation of airborne mineral dusts and

particulate may contribute to the development of bronchitis, reduced breathing capacity, and may

lead to the increased susceptibility to lung disease.

Signs and Symptoms of Exposure: (Dust) tearing of eyes, burning sensation in the throat, cough, and chest discomfort.

Aggravation of Pre-existing Conditions: The excessive inhalation of mineral dust may aggravate pre-existing chronic lung conditions

such as, but not limited to, bronchitis, emphysema, and asthma.

Reproductive Hazards: Not a reproductive hazard.

Section IV: First Aid

Emergency and First Aid Procedures: EYE CONTACT: Flush eyes immediately with water for at least 15 minutes. Seek medical

attention if irritation persists.

SKIN CONTACT: Immediately wash affected area with mild soap and water to remove any dust adhering to the skin. Seek medical attention if irritation develops or persists.

INHALATION: If exposed to excessive levels of dust or fumes, remove to fresh air and seek

medical attention if cough or other symptoms develop. If not breathing, give artificial

respiration or give oxygen by trained personnel, and get medical attention.

IF INGESTED: Unlikely route of exposure. If ingested in sufficient quantity and victim is conscious, give 1-2 glasses of water or milk. Never give anything by mouth to an

unconscious person. Leave decision to induce vomiting to qualified medical personnel, since particles may be aspirated into the lungs. Seek immediate medical attention.

Section V: Fire and Explosion Hazard Data

Emergency Overview: Not a fire or spill hazard. Low toxicity; dry dust is a nuisance particulate. Generally,

health effects are provided for exposure to dust that may be generated during product

transfer and handling.

Flammable Properties: Material will not burn. No unusual fire or explosion hazards.

Extinguishing Media: Use extinguishing media appropriate to combustibles in the surrounding area.

Protection for Firefighters: Wet material should be kept out of eyes and off skin. As in any fire, wear self-contained

breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

protective gear. Material does not give off toxic fumes in a fire unless molten.

Section VI: Accidental Release

Containment: Product is a dry solid (granular or powder) and not readily soluble in water. However,

prevent spilled product from entering streams, water bodies, and wastewater systems.

Cleanup:

Vacuum or sweep up dry material and place in a container for reuse. Avoid creating

excessive airborne dust. It is recommended that cleanup personnel wear approved respiratory protection, gloves, long sleeved clothing and goggles to prevent irritation from

contact and inhalation.

Collection: If possible, collect and reuse spilled product.

Evacuation: Isolate hazard area. Keep unnecessary and unprotected personnel from entering area.

Potential Environmental Effects: Derived from natural ores; no adverse environmental effects known. However, prevent

spilled product from entering streams, water bodies, and wastewater systems

Section VII: Precautions for Safe Handling and Use

Handling: Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with

skin and eyes.

Storage: Store in cool, dry area. Keep container closed when not in use.

Waste Disposal: If possible, collect and reuse spilled product. Disposal Method: Follow all applicable

Federal, State, and local laws, rules, and regulations regarding the proper disposal of this

material

Section VIII: Control Measures/ PPE Requirements

Engineering Controls: Minimize dust generation and accumulation. Avoid breathing dust. Keep exposure below

the exposure limits listed in Section III.

Personal Protective Equipment:

Eye Protection: Corrosive to eyes. Wear protective safety goggles when dust

generation is likely.

Skin Protection: Wear clothing sufficient to cover the skin, safety shoes, and leather

gloves for hand protection against dry material.

Respiratory Protection: Use NIOSH/MSHA approved respiratory protection (air purifying or air supplying) when concentrations are above exposure limit value. A respiratory protection program that meets OSHA 29 CFR part 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a

respirator.

Good Hygienic Practice: Wash thoroughly after using product. Wash contaminated clothing. Wash hands before

eating or drinking.

Section IX: Physical and Chemical Properties

Bulk density: 180-200 lbs/ft³ Freeze Point: Solid at STP % volatile by vol: 0% H₂O

Water solubility:InsolubleMelting Point:>3400 °FVapor Density:N/ApH: (10% aqueous olumn)N/ABoiling Point:N/AVapor Pressure:

slurry)

Appearance and Odor: Chrome ore is usually black, but does show some variation from iron-black to brownish black with some brown

streaks. Various grades can vary from large pieces down to fine powders. Odorless.

Section X: Stability/ Reactivity Data

Stability: Stable under normal conditions of storage.

Conditions to Avoid: None under normal conditions.

Incompatibility (materials to avoid): Chrome ore can react at high temperature with molten alkalis and alkali vapors forming

water-soluble chromium salts.

None under normal conditions.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition or Byproducts:

Section XI: Toxicological Properties

Component CAS RTECS Toxicity

Chrome Ore 1308-31-2 N/A

Section XII: Ecological Information

Material derived from mineral ores. No data available on any adverse effects of this material on the environment.

Section XIII: Disposal Considerations

RCRA: As manufactured, this product is not a RCRA listed hazardous waste and does not exhibit any characteristics of a hazardous waste, including TCLP.

Disposal Method: This product is generally suitable for landfill disposal. Follow all applicable Federal, State and local laws regarding proper disposal. If this product has been altered or contaminated with other hazardous materials, appropriate waste analysis may be necessary to determine method of disposal.

Section XIV: Transportation Information

USDOT: Not regulated

Section XV: Regulatory

Note: Prince Minerals, Inc.'s chromite ore is mined from the Transvaal Region of South Africa. This ore and the un-reacted ore component of the chromite ore processing residue are exempt from the reporting requirements under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) and Section 6607 of the Pollution Prevention Act of 1990 (PPA). See 66FR24066 for complete citation.

RCRA: No CERCLA: No SARA: No

TSCA: Not Regulated

Section XVI: Other Information

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