

## 1. Identification

**Product identifier** CHROMOX; ChromeCAST

**Other means of identification**

**Product code** 100829, 103115

**Synonyms** Chromite (Cr<sub>2</sub>FeO<sub>4</sub>) \* Chrome ore \* IRON CHROMITE

**Recommended use** Not available.

**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** Prince Minerals, Inc.

**Address** 21 West 46th Street  
Fourteenth Floor  
New York, NY 10036  
United States

**Telephone** General Information (713) 955-5398

**Website** www.princecorp.com

**E-mail** Not available.

**Emergency phone number** CHEMTREC (800) 424-9300

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

#### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** The substance does not meet the criteria for classification.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

#### Substances

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

| Chemical name                                | Common name and synonyms  | CAS number | %   |
|--|---|------------|-----|
| Chromite (Cr <sub>2</sub> FeO <sub>4</sub> ) | Chromite (Cr <sub>2</sub> FeO <sub>4</sub> )<br>Chrome ore<br>IRON CHROMITE | 1308-31-2  | 100 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

|   |  |
|---|--|
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.                         |
| <b>Eye contact</b>  | Rinse with water. Get medical attention if irritation develops and persists.                                     |
| <b>Ingestion</b>  | Rinse mouth. Get medical attention if symptoms occur.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Irritation of eyes and mucous membranes.   |
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

## 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).                                   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Use water spray to cool unopened containers.  |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| <b>General fire hazards</b>  | No unusual fire or explosion hazards noted.   |

## 6. Accidental release measures

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.   |
| <b>Methods and materials for containment and cleaning up</b>               | Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.  |

## 7. Handling and storage

|   |   |
|---|---|
| <b>Precautions for safe handling</b>                                | Observe good industrial hygiene practices.  |
| <b>Conditions for safe storage, including any incompatibilities</b> | Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). |

## 8. Exposure controls/personal protection

|  |   |
|--|---|
| <b>Occupational exposure limits</b>  | No exposure limits noted for ingredient(s).   |
| <b>Biological limit values</b>   | No biological exposure limits noted for the ingredient(s).  |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| <b>Individual protection measures, such as personal protective equipment</b> |   |
| <b>Eye/face protection</b>   | Wear safety glasses with side shields (or goggles).   |
| <b>Skin protection</b>   |   |
| <b>Hand protection</b>   | Wear appropriate chemical resistant gloves.   |
| <b>Other</b>   | Wear suitable protective clothing.  |
| <b>Respiratory protection</b>  | In case of insufficient ventilation, wear suitable respiratory equipment.   |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.   |
| <b>General hygiene considerations</b>  | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.   |

## 9. Physical and chemical properties

|   |                                    |
|---|------------------------------------|
| <b>Appearance</b>                                   | Solid.                             |
| <b>Physical state</b>                               | Solid.                             |
| <b>Form</b>   | Solid.                             |
| <b>Color</b>  | Black or Dark brown.               |
| <b>Odor</b>   | Odorless.                          |
| <b>Odor threshold</b>                               | Not available.                     |
| <b>pH</b>   | Not available.                     |
| <b>Melting point/freezing point</b>                 | Not available.                     |
| <b>Initial boiling point and boiling range</b>      | Not available.                     |
| <b>Flash point</b>                                  | Not available.                     |
| <b>Evaporation rate</b>                             | Not available.                     |
| <b>Flammability (solid, gas)</b>                    | Not available.                     |
| <b>Upper/lower flammability or explosive limits</b> |                                    |
| <b>Flammability limit - lower (%)</b>               | Not available.                     |
| <b>Flammability limit - upper (%)</b>               | Not available.                     |
| <b>Explosive limit - lower (%)</b>                  | Not available.                     |
| <b>Explosive limit - upper (%)</b>                  | Not available.                     |
| <b>Vapor pressure</b>                               | < 0.0000001 kPa at 25 °C           |
| <b>Vapor density</b>                                | Not available.                     |
| <b>Relative density</b>                             | Not available.                     |
| <b>Solubility(ies)</b>                              |                                    |
| <b>Solubility (water)</b>                           | Not available.                     |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                     |
| <b>Auto-ignition temperature</b>                    | Not available.                     |
| <b>Decomposition temperature</b>                    | Not available.                     |
| <b>Viscosity</b>                                    | Not available.                     |
| <b>Other information</b>                            |                                    |
| <b>Density</b>                                      | 5.00 g/cm <sup>3</sup> estimated   |
| <b>Molecular formula</b>                            | Cr <sub>2</sub> -Fe-O <sub>4</sub> |
| <b>Molecular weight</b>                             | 223.84 g/mol                       |
| <b>Specific gravity</b>                             | 5                                  |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials.  |
| <b>Incompatible materials</b>             | Strong oxidizing agents.  |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | No adverse effects due to inhalation are expected.       |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.     |
| <b>Eye contact</b>  | Direct contact with eyes may cause temporary irritation. |

|   |  |
|---|--|
| <b>Ingestion</b>  | Expected to be a low ingestion hazard.   |
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Irritation of eyes and mucous membranes.   |
| <b>Information on toxicological effects</b>   |  |
| <b>Acute toxicity</b>   | Not available.   |
| <b>Skin corrosion/irritation</b>  | Prolonged skin contact may cause temporary irritation.   |
| <b>Serious eye damage/eye irritation</b>  | Direct contact with eyes may cause temporary irritation.   |
| <b>Respiratory or skin sensitization</b>  |  |
| <b>Respiratory sensitization</b>  | Not a respiratory sensitizer.  |
| <b>Skin sensitization</b>   | This product is not expected to cause skin sensitization.  |
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| <b>Carcinogenicity</b>  | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.                                  |

#### **IARC Monographs. Overall Evaluation of Carcinogenicity**

Chromite (Cr<sub>2</sub>FeO<sub>4</sub>) (CAS 1308-31-2) 3 Not classifiable as to carcinogenicity to humans.

#### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

|   |  |
|---|--|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects. |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.  |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.  |
| <b>Aspiration hazard</b>                                  | Not an aspiration hazard.  |

## **12. Ecological information**

|                                      |  |
|--------------------------------------|--|
| <b>Ecotoxicity</b>                   | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Persistence and degradability</b> | No data is available on the degradability of this product.   |
| <b>Bioaccumulative potential</b>     | No data available.   |
| <b>Mobility in soil</b>              | No data available.   |
| <b>Other adverse effects</b>         | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.            |

## **13. Disposal considerations**

|  |  |
|--|--|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site.   |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.   |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging</b>                | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.       |

## **14. Transport information**

|             |                                   |
|-------------|-----------------------------------|
| <b>DOT</b>  | Not regulated as dangerous goods. |
| <b>IATA</b> | Not regulated as dangerous goods. |
| <b>IMDG</b> | Not regulated as dangerous goods. |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## 15. Regulatory information

### US federal regulations

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. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Chromite (Cr<sub>2</sub>FeO<sub>4</sub>) (CAS 1308-31-2)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)**  
Priority pollutant  
Toxic pollutant

**Safe Drinking Water Act (SDWA)**  
0.1 mg/l  
0.1 mg/l

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. Massachusetts RTK - Substance List

Chromite (Cr<sub>2</sub>FeO<sub>4</sub>) (CAS 1308-31-2)

#### US. New Jersey Worker and Community Right-to-Know Act

Chromite (Cr<sub>2</sub>FeO<sub>4</sub>) (CAS 1308-31-2)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Chromite (Cr<sub>2</sub>FeO<sub>4</sub>) (CAS 1308-31-2)

#### US. Rhode Island RTK

Chromite (Cr<sub>2</sub>FeO<sub>4</sub>) (CAS 1308-31-2)

#### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

## International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | No                     |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

|                      |            |
|----------------------|------------|
| <b>Issue date</b>    | 10-28-2014 |
| <b>Revision date</b> | 10-28-2014 |
| <b>Version #</b>     | 02         |

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.