

Material Safety Data Sheet

Substance Identification

Identity: IRON CHROMITE **Cas #:** 1308-38-9
Trade Names: Chromox, Slurry Grade Chromox

Manufacturer: The Prince Manufacturing Co.
One Prince Plaza
Quincy, IL 62305
217-222-8854
Emergency: Chemtrec
1-800-424-9300

Components and Contaminants

<u>Chemical Name:</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Percent</u>
Chromium III Compound (as Cr)		0.5 mg/m ³	0.5 mg/m ³ (TWA)	30-35% Cr
Aluminum Oxide (total) (respirable fraction)	1344-28-1	15 mg/m ³ 5 mg/m ³	10 mg/m ³ (TWA) ---	12-17% Al ₂ O ₃
Ferrous Oxide (total) (respirable fraction)	1345-25-1	15 mg/m ³ 5 mg/m ³	5 mg/m ³ ---	22-27% FeO
Magnesium Oxide	1309-48-4	---	---	8-12% MgO
Silica, Crystalline Quartz (respirable)	14808-60-7	(10 mg/m ³)/(%SiO ₂ +2)	0.05 mg/m ³ (TWA)	1.3% SiO ₂

Physical Data

Boiling Point: NA **Specific Gravity (H₂O=1):** 4.4
Vapor Pressure (mm/Hg): NA **Melting Point:** 3500 - 4000° F
Vapor Density (Air=1): NA **Evaporation Rate (Butyl Acetate=1):** NA
Solubility in Water: insoluble
Appearance and Odor: black powder, no odor.

Fire and Explosion Hazard Data

Flash Point: Not combustible
Flammable Limits: LEL NA UEL NA
Extinguishing Media: Water, foam, CO₂, dry chemical.
Special Fire Fighting Procedures: In the event of fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.
Unusual Fire and Explosion Hazards: Not combustible.

Reactivity Data

Stability: Stable under ordinary conditions of use and storage.
Conditions to Avoid: None known.
Incompatibility (materials to avoid): None known.
Hazardous Decomposition or Byproducts: None known.
Hazardous Polymerization: Will not occur.

Health Hazard Data

Route of Entry: **INHALATION:** May cause irritation of mucous membrane if dust is inhaled over a prolonged period of time. Prolonged exposure to silica dust may result in silicosis, a fibrotic lung disease.
SKIN: No.
INGESTION: Ingestion of Iron Chromite may cause abdominal pain and nausea.

Health Hazard Data (cont.)

Health Hazards (Acute and Chronic):	Respiratory disease may result from prolonged overexposure. Can cause eye irritation.
Carcinogenicity:	NTP: Yes (Silica) IARC Monographs: Yes (Silica)
Signs and Symptoms of Exposure:	Excessive inhalation of dust may result in shortness of breath and reduced pulmonary function. Symptoms of silicosis include impaired pulmonary function and wheezing.
Aggravation of Pre-existing Conditions:	Persons with impaired respiratory function may be more susceptible to the effect of this substance.
Emergency and First Aid Procedures:	IF INHALED , remove to fresh air and seek medical attention for any breathing difficulty. IN CASE OF SKIN CONTACT , wash with soap & water. Seek medical attention if red & irritated. IN CASE OF EYE CONTACT , flush eyes immediately with water for at least 15 minutes. Seek medical attention if irritation persists. IF INGESTED , induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician immediately.

Precautions for Safe Handling and Use

Material Release or Spill Precautions:	Should a spill occur, ventilate area. Clean-up personnel require respiratory protection. Recover uncontaminated material for use. Vacuum or sweep remaining material, keeping dust to a minimum.
Waste Disposal Method:	Dispose of unreclaimable material in a RCRA-approved waste facility.
Handling and Storing Precautions:	Protect containers from damage and keep closed when not in use.
Other Precautions:	Observe good personal hygiene. Wash after handling.

Control Measures

Respiratory Protection:	Use NIOSH approved particulate respirator if dust generation occurs or is anticipated. OSHA standard 1910.134 or ANSI Z88.2-1980 specifications are recommended.
Ventilation:	A system of local and/or general exhaust is recommended to keep employee exposures below the airborne exposure limits. Local exhaust is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.
Protective Gloves:	Yes
Eye Protection:	Safety goggles are recommended.
Other Protective Clothing or Equipment:	Use other protective equipment when necessary in order to avoid prolonged exposure to skin.
Work and Hygienic Practices:	Observe good personal hygiene. Wash after handling.

SARA Title III Section 313 Supplier Notification

This product contains the following toxic chemicals subject to the reporting requirements of section 313 Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.45:

<u>Component</u>	<u>CAS #</u>	<u>% by Weight</u>
Iron Chromite	1308-38-9	30 - 35% Cr

This information must be included in all MSDS's that are copied and distributed for this material.
