

MATERIAL SAFETY DATA SHEET

Section 1: Product/Company Information

Identity: Iron Chips, Carbonyl Iron, Iron Powder

Mfg. Name: Powder Technology Inc.
14331 Ewing Avenue S.
Burnsville, MN 55306

Emergency Number: (952) 894-8737
Number for Info: (952) 894-8737
Date Updated: 20 September 2006

Section 2: Emergency and First Aid

- **Eyes:** Flush eyes with plenty of water, lifting the upper and lower eyelids. Seek medical attention if irritation continues.
- **Skin:** Wash skin with soap and water.
- **Inhalation:** Move exposed person to fresh air. Perform artificial respiration if breathing has stopped. Seek medical attention.
- **Ingestion:** Give 1-2 glasses of water or milk and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

Section 3: Composition Information

Typical chemical composition:

Chemical	CAS Number	Percent of Weight
Iron	7439-89-6	>98.5

Section 4: Hazardous Ingredients/Identity Information

Hazardous Components	%	OSHA/PEL	ACGIH/TLV	Sec. 302	Sec. 304	Sec. 313
Iron	0-100	10 mg/m ³	5 mg/m ³	No	No	No

	Health	Flammability	Reactivity
HMIS Ratings (Solid)	0	0	0
HMIS Ratings (Powder -20+50 Mesh)	1	1	1
HMIS Ratings (Powder -50+325 Mesh)	1	2	2
HMIS Ratings (Powder -325 Mesh)	1	3	2

Section 5: Hazard Identification

Acute Effects:

- **Inhalation:** Inhalation of dust or powder may cause irritation to the respiratory system and possibly acute iron poisoning. Large amounts of iron may cause iron pneumoconiosis.
- **Ingestion:** No acute health effects recorded.
- **Skin:** May cause irritation.
- **Eye:** May cause irritation.

Chronic Effects:

- **Inhalation:** Inhalation of finely divided powder may cause pulmonary fibrosis. May cause chronic iron poisoning and pathological deposition of iron in the body tissue.
- **Ingestion:** May cause damage to the liver.
- **Skin:** No chronic health effects recorded.
- **Eye:** No chronic health effects recorded.

Target Organs: May affect the liver and kidney.

Medical Conditions Generally Aggravated by Exposure: Pre-existing respiratory disorders.

Section 6: Accidental Release Measures

Wear respirators when cleaning spilled material. Provide adequate ventilation. Collect spilled material in a manner that minimizes dust generation. Recycle or dispose of waste.

Section 7: Physical/Chemical Data

- **Appearance and Color:** Grey powder, odorless
- **Flash Point:** Above 700°C
- **Flammability:** Non flammable
- **Auto ignition Temperature:** Above 700°C
- **Melting Point:** 1535°C
- **Boiling Point:** 3000°C
- **Solubility In Water:** Not soluble
- **Relative Density (water=1):** 1.0-3.0

Section 8: Fire and Explosion Hazard Data

- **Extinguishing Media:** Dry chemical, dry sand, or sodium chloride. Do not use water.
- **Unusual Fire And Explosion Hazards:** Moderate hazard as fine powder (-325 mesh) when exposed to open flame.
- **Fire Fighting Equipment:** Use protective equipment including positive pressure self-contained breathing device.
- **Precautions:** Keep away from sparks and open flame. Keep container closed.
- **Hazardous decomposition:** None known.

Section 9: Stability and Reactivity Data

- **Stability:** Stable to ignition temperatures of 700°C.
- **Incompatible Materials:** Low reactivity with acids.
- **Hazardous Decomposition:** None known.

Section 10: Handling and Storage

Avoid dust generation. Wash thoroughly after handling. Store in a cool, dry place.

Section 11: Toxicological Information

Iron compounds as a class are not considered an industrial risk. The U.S. National Toxicology Program, OSHA, or IARC has not identified this product as a carcinogen.

Section 12: Exposure Control/Personal Protection

- **Ventilation:** Keep dust levels below occupational exposure limits. Use local exhaust ventilation if necessary.
- **Personal Protective Equipment:**
 - **Eyes:** Wear safety goggles or glasses with side shields.
 - **Skin:** None required. Protective gloves will minimize exposure.
 - **Inhalation:** Use local ventilation. Use OSHA approved respirator if required.

Section 13: Disposal Considerations

All disposal methods must be in accordance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterization and compliance with applicable laws are the responsibility solely of the waste generator.

Section 14: Transportation Data

Not regulated

Section 15: Other Regulatory Information

NONE

Section 16: Other Information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. It is the user's obligation to determine the conditions of safe use of this product.