



MATERIAL SAFETY DATA SHEET  
COMPLIES WITH 29 CFR 1910.1200.  
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 05-06-96

---

## CHEMICAL IDENTITY

---

LABEL IDENTITY	<b>IRON METAL</b>
CHEMICAL NAME/SYNONYMS	<b>IRON METAL</b>
FORMULA	<b>Fe</b>
CHEMICAL FAMILY	<b>METAL</b>
CAS REGISTRY NUMBER	<b>7439-89-6, LISTED IN TSCA INVENTORY</b>
HAZARDOUS INGREDIENTS	<b>IRON</b>
%: <b>100</b>	<b>TLV: 5mg/m3 (for Fe2O3 fumes as Fe)</b>

---

## PHYSICAL AND CHEMICAL PROPERTIES

---

COLOR, FORM AND ODOR	<b>gray metallic powder or pieces, no odor</b>
BOILING POINT	<b>275°</b>
DENSITY (gm/cc)	<b>7.86</b>
VAPOR PRESSURE @ 20°	<b>NA</b>
% VOLATILE BY VOLUME (%)	<b>NA</b>
REACTION WITH WATER	<b>None</b>
EVAPORATION RATE (H2O=1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Insoluble</b>
MELTING POINT	<b>1535</b>

---

## FIRE AND EXPLOSION HAZARD DATA

---

FLASH POINT	<b>NA</b>
AUTOIGNITION TEMPERATURE (°C)	<b>NA</b>
FLAMMABILITY	<b>Very low as powder</b>
EXTINGUISHING MEDIA	<b>Agent for metal fires (G-1 powder, TEC or MET-L-X)</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>None</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>None</b>



## IRON MATERIAL SAFETY DATA SHEET

---

### HEALTH HAZARD INFORMATION

---

TOXICITY DATA **ND**  
HMIS RATING:  
HEALTH: **0** FLAMMABILITY: **0** REACTIVITY: **0** PERSONAL PROTECTION: **B**

ROUTES OF ENTRY  
INHALATION: **Yes**  
SKIN: **ND**  
INGESTION: **ND**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Lung Disorders**

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **inhalation of iron or iron oxide on an acute basis has not been shown to produce pulmonary injury. Very long term exposure can cause a form of benign pneumoconiosis.**

DERMAL/EYE: **mild irritation to eye. Not considered a primary skin irritant.**

OTHER: **iron possesses a low order of toxicity, but ingestion of large amounts can cause iron poisoning.**

---

CARCINOGENICITY: **None** NTP: IARC MONOGRAPHS: OSHA REGULATE:

---

EMERGENCY FIRST AID PROCEDURES:

INGESTION: **induce vomiting**

INHALATION: **remove to fresh air**

SKIN CONTACT: **flush with soap and water**

EYE CONTACT: **flush to remove particles**

---

### REACTIVITY DATA

---

STABILITY	<b>Stable</b>
CONDITIONS CONTRIBUTING TO UNSTABILITY	<b>None</b>
INCOMPATIBILITY (MATERIALS TO AVOID)	<b>None</b>
HAZARDOUS DECOMPOSITION PRODUCTS	<b>None</b>
HAZARDOUS POLYMERIZATION	<b>Will Not Occur</b>
CONDITIONS TO AVOID	<b>None</b>



## IRON MATERIAL SAFETY DATA SHEET

---

### SAFE HANDLING AND USE

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

**Vacuum equipped with HEPA filter.**

WASTE DISPOSAL METHOD:

**With normal refuse.**

---

### SPECIAL PROTECTIVE INFORMATION

---

RESPIRATORY PROTECTION	<b>Half-mask air purifying respirator for dusty conditions</b>
LOCAL EXHAUST	<b>Recommended</b>
MECHANICAL (general)	<b>Use with adequate ventilation</b>
SPECIAL	<b>NA</b>
OTHER	<b>NA</b>
PROTECTIVE GLOVES	<b>No special gloves needed</b>
EYE PROTECTION	<b>Safety glasses</b>
OTHER PROTECTIVE EQUIPMENT	<b>No special protective equipment is needed</b>

---

### SPECIAL PRECAUTIONS

---

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

**Wash thoroughly after handling, keep container closed.**

TRANSPORTATION REQUIREMENTS	DOT CLASS:	<b>Not Classified</b>
	UN NUMBER:	<b>N. C.</b>
	IMCO CLASS:	<b>N. C.</b>
	OTHER:	

PRECAUTIONARY LABELING **NONE**

---

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

**NA= NOT APPLICABLE**

**ND= NO DATA FOUND**