



**HI-VALLEY CHEMICAL**  
LABORATORY PRODUCTS

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# SAFETY DATA SHEET

Hi Valley Chemical

## Ferric Oxide

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Supplier Details:** High Valley Products, Inc.  
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Centerville, Utah 84014

**Emergency:** PERS: 800-633-8253

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### 2 HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

**GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):**

- Health, Skin corrosion/irritation, 2
- Health, Serious Eye Damage/Eye Irritation, 2 A
- Health, Specific target organ toxicity - Single exposure, 2

#### GHS Label Elements, Including Precautionary Statements

**GHS Signal Word:** **WARNING**

**GHS Hazard Pictograms:**



**GHS Hazard Statements:**

- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H371 - May cause damage to organs

**GHS Precautionary Statements:**

- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 - Wash face, hands and any exposed skin thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

#### Hazards not Otherwise Classified (HNOC) or not Covered by GHS

**Inhalation:** May cause respiratory irritation

**Skin Contact:** May cause irritation.

**Eye Contact:** May cause irritation.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:**

Cas#	%	Chemical Name
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**4 FIRST AID MEASURES**

<b>Inhalation:</b>	If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Skin Contact:</b>	Wash with soap and water.
<b>Eye Contact:</b>	Flush eyes with water as a precaution.
<b>Ingestion:</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5 FIRE FIGHTING MEASURES**

Extinguishing media  
Suitable extinguishing media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture  
Iron oxides

Advice for firefighters  
Wear self-contained breathing apparatus for firefighting if necessary.

Further information  
No data

**6 ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures:**

Avoid dust formation. Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions:**

No special environmental precautions required.

**Methods and materials for containment and cleaning up:**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**7 HANDLING AND STORAGE**

<b>Handling Precautions:</b>	Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.
<b>Storage Requirements:</b>	Keep container tightly closed. Store in cool/dry and well ventilated area.

**8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>Engineering Controls:</b>	Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Personal Protective Equipment:</b>	Ferric oxide (1309-37-1) []  Personal protective equipment  Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).  Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Ferric oxide (1309-37-1) []

Components with workplace control parameters

TWA 5 mg/m3 USA. ACGIH Threshold Limit Values (TLV)  
Pneumoconiosis Not classifiable as a human carcinogen

TWA 15 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
Limits for Air Contaminants

TWA 5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
Limits for Air Contaminants

TWA 10 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
Limits for Air Contaminants

TWA 10 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -  
1910.1000

See Appendix D - Substances with No Established RELs

TWA 5 mg/m3 USA. NIOSH Recommended Exposure Limits

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### PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Red, orange, or reddish-brown powder	<b>Odor:</b>	None
<b>Physical State:</b>	Powder	<b>Molecular Formula:</b>	Fe <sub>2</sub> O <sub>3</sub>
<b>Odor Threshold:</b>	No data available	<b>Solubility:</b>	Insoluble in alcohol, cold water, diethyl et
<b>Particle Size:</b>	No data available	<b>Softening Point:</b>	No data available
<b>Spec Grav./Density:</b>	5.12-5.24	<b>Percent Volatile:</b>	No data available
<b>Viscosity:</b>	No data available.	<b>Heat Value:</b>	No data available
<b>Sat. Vap. Conc.:</b>	No data available	<b>Freezing/Melting Pt.:</b>	1538 C (2800 F)
<b>Boiling Point:</b>	No data available	<b>Flash Point:</b>	No data available
<b>Flammability:</b>	No data available.	<b>Octanol:</b>	No data available
<b>Partition Coefficient:</b>	No data available	<b>Vapor Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available	<b>VOC:</b>	No data available
<b>pH:</b>	No data available	<b>Bulk Density:</b>	No data available
<b>Evap. Rate:</b>	No data available.	<b>Auto-Ignition Temp:</b>	No data available
<b>Molecular weight:</b>	159.69	<b>UFL/LFL:</b>	No data available
<b>Decomp Temp:</b>	No data available		

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### STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid:</b>	No data available
<b>Materials to Avoid:</b>	Strong Acids; Peroxides; Chloroformates
<b>Hazardous Decomposition:</b>	No data available
<b>Hazardous Polymerization:</b>	No data available.

Ferric oxide (1309-37-1) []

Information on toxicological effects

Acute toxicity:

Oral LD50 no data available

Inhalation LC50 Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: Skin - Human - Skin irritation

Serious eye damage/eye irritation: Eyes - Human - Eye irritation

Eyes - Human - Moderate eye irritation

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

Carcinogenicity - rat - Subcutaneous:

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Diiron trioxide)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System):

no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.

Signs and Symptoms of Exposure: Long term inhalation exposure to iron (oxide fume or dust) can cause siderosis. Siderosis is considered to be a benign pneumoconiosis and does not normally cause significant physiologic impairment. Siderosis can be observed on x-rays with the lungs having a mottled appearance., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

RTECS: NO7400000

Ferric oxide (1309-37-1) []

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

### 13 DISPOSAL CONSIDERATIONS

Ferric oxide (1309-37-1) []

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

### 14 TRANSPORT INFORMATION

Non-hazardous for air, sea and road freight.

### 15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

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Ferric oxide (1309-37-1) [n/a%] MASS, OSHAWAC, PA, TSCA, TXAIR

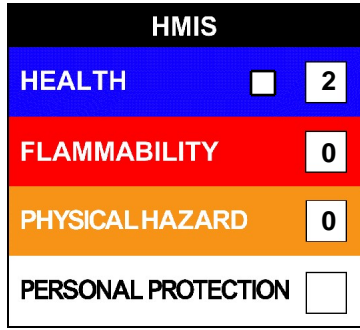
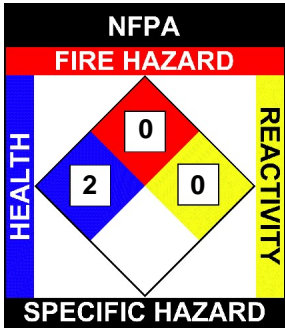
Regulatory CODE Descriptions

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MASS = MA Massachusetts Hazardous Substances List  
OSHAWAC = OSHA workplace Air Contaminants  
PA = PA Right-To-Know List of Hazardous Substances  
TSCA = Toxic Substances Control Act  
TXAIR = TX Air Contaminants with Health Effects Screening Level

### 16 OTHER INFORMATION

NFPA: Health = 2, Fire = 0, Reactivity = 0, Specific Hazard = n/a

HMIS III: Health = 2, Fire = 0, Physical Hazard = 0



**Disclaimer:**

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