

# MATERIAL SAFETY DATA SHEET

## Chemical Product

Product Name: FERRIC OXIDE BLACK  
CAS#: 1309-37-1  
Synonym: Iron  
(III) Oxide Black  
Chemical Name: Ferric Oxide Black  
Chemical Formula: Fe<sub>2</sub>O<sub>3</sub>

## Composition and Information on Ingredients

| Name               | S.K.U    | % by Weight |
|--------------------|----------|-------------|
| FERRIC OXIDE BLACK | GCS-8394 | 100         |

## Hazards Identification

### Potential Acute Health Effects:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

### Potential Chronic Health Effects:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

## First Aid Measures

### Eye Contact:

Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

### Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.  
Wash contaminated clothing before reusing.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:**

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation: Not Available.

**Ingestion:**

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

**Serious Ingestion:**

**Fire and Explosion Data**

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

**Accidental Release Measures**

**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level

above TLV. Check TLV on the MSDS and with local authorities.

## Handling and Storage

Precautions: No specific safety phrase has been found applicable for this product.

### Storage:

No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

## Exposure Controls/Personal Protection

### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protection:

Safety glasses. Synthetic apron. Gloves (impervious). For most conditions, no respiratory protection should be needed. However, if material is heated or sprayed and if atmospheric levels exceed exposure guidelines, use an approved vapor (air purifying) respirator.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### Exposure Limits:

TWA: 5 (mg/m<sup>3</sup>) from ACGIH [1995] Consult local authorities for acceptable exposure limits.

## Physical and Chemical Properties

### Physical state and appearance

: **Solid.**

|                      |                   |
|----------------------|-------------------|
| Odor                 | : Not available.  |
| Taste                | : Not available.  |
| Molecular Weight     | : 159.7 g/mole    |
| Color                | : Not available.  |
| pH (1% soln/water)   | : Not applicable. |
| Boiling Point        | : Decomposes.     |
| Melting Point        | : 1565°C (2849°F) |
| Critical Temperature | : Not available.  |

|                        |                            |
|------------------------|----------------------------|
| Specific Gravity       | : 5.24 (Water = 1)         |
| Vapor Pressure         | : Not applicable.          |
| Vapor Density          | : Not available.           |
| Volatility             | : Not available.           |
| Odor Threshold         | : Not available.           |
| Water/Oil Dist. Coeff. | : Not available.           |
| Ionicity (in Water)    | : Not available.           |
| Dispersion Properties  | : Not available.           |
| Solubility             | : Insoluble in cold water. |

## Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials.

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

### Special Remarks on Reactivity:

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

## Toxicological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

### Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

### Toxicity of the Products of Biodegradation:

The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available

Toxicological Data on Ingredients: Ferric oxide LD50: Not available. LC50: Not available.

## Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

### Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

### Toxicity of the Products of Biodegradation:

The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

## Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Transformation Information

Land transport (ADR-RID)

General information: Not regulated.

Sea transport (IMDG) [English only]

General information: Not regulated.

Air transport (ICAO-IATA) [English only]

General information: Not regulated.

## Other Regulatory Information

### Federal and State Regulations:

Pennsylvania RTK: Ferric oxide  
Massachusetts RTK: Ferric oxide  
TSCA 8(b) inventory: Ferric oxide

### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

### Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).  
DSCL (EEC): This product is not classified according to the EU regulations.

**HMIS (U.S.A.):**

Health Hazard: 2

**Fire Hazard: 1**

Reactivity: 0

**Personal Protection: E**

National Fire Protection Association (U.S.A.):

**Health: 2**

Flammability: 1

**Reactivity: 0**

Specific hazard:

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

**Additional Information**

References: Not available.

Other Special Considerations: Not available.


## ***Disclaimer:***

\*\*\*\*\*

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.



**makes no representations or warranties, either express or implied, including without limitation any**

warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly,  will not be responsible for damages resulting from use of or reliance upon this information.