



QUALIKEMS FINE CHEM PVT. LTD.
5531, BASTI HARPHOOL SINGH, SADAR THANA ROAD, DELHI-06
Material Safety Data Sheet
Ferric Oxide Red

Section 1 - Chemical Product and Company Identification

MSDS Name: Ferric Oxide Red

Synonyms: Ferric Oxide Red; Iron (III) Oxide; Iron Sesquioxide; Red Iron Oxide.

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1309-37-1	Iron (III) Oxide	100	215-168-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: red-brown to black solid.

Warning! May cause mechanical eye and skin irritation. May cause respiratory tract irritation. Causes severe digestive tract irritation with pain, nausea, vomiting and diarrhea. May corrode the digestive tract with hemorrhaging and possible shock. Inhalation of fumes may cause metal-fume fever.

Target Organs: None.

Potential Health Effects

Eye: Dust may cause mechanical irritation.

Skin: Dust may cause mechanical irritation.

Ingestion: May cause severe and permanent damage to the digestive tract. May cause liver damage. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause hemorrhaging of the digestive tract. The toxicological properties of this substance have not been fully investigated.

Inhalation: Dust is irritating to the respiratory tract. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count.

Chronic: Chronic inhalation may cause effects similar to those of acute inhalation.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Iron (III) Oxide	5 mg/m ³ TWA (dust and fume, as Fe)	5 mg/m ³ TWA (dust and fume, as Fe) 2500 mg/m ³ IDLH	10 mg/m ³ TWA

		(dust and fume, as Fe)	
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Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: red-brown to black

Odor: none reported

pH: Not available.

Vapor Pressure: 1 mm Hg @ 20C

Vapor Density: Not available.

Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point:2849 deg F

Decomposition Temperature:Not available.

Solubility: Insoluble in water.

Specific Gravity/Density:5.24 (water=1)

Molecular Formula:Fe₂O₃

Molecular Weight:159.6922

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, dust generation, excess heat.

Incompatibilities with Other Materials: Aluminum, bromine pentafluoride, calcium hypochlorite, carbon dioxide, cesium carbide, ethylene oxide, hydrazine, performic acid.

Hazardous Decomposition Products: Irritating and toxic fumes and gases.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 1309-37-1; NO7400000; NO7420000; NO7480000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 1309-37-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: No information reported.

Physical: No information available.

Other: None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	IATA	
Shipping Name:	Not regulated as a hazardous material	
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

Hazard Symbols:Not available.

Risk Phrases:

Safety Phrases:

Section 16 - Additional Information

MSDS Creation Date: 12/12/2000

Revision #3 Date: 10/03/2005

Revision #4 Date: 09/03/2010

Revision #5 Date: 08/03/2015

Revision #6 Date: 07/03/2020

Revision #7 Date: 06/03/2025

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