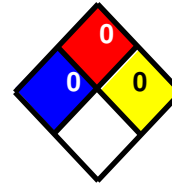




Magnetite Fe₃O₄

Date Revised: May 5, 2009



NFPA RATING

HEALTH	0	
FLAMMABILITY	0	
REACTIVITY	0	
PROTECTIVE EQUIPMENT		

HMIS RATING

SECTION I. PRODUCT IDENTIFICATION

Product Name: Magnetite; Iron Oxide

Manufacturer/Vendor Information: Southern Minerals Group
PO Box 535
Silver City NM 88062

24-Hour Emergency Phone: (800)424-9300
Other Information: Phone (602)366-8100
FAX (602)366-7309

SECTION II. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS No.</u>	<u>Chemical Name</u>		<u>Exposure Limits</u>	<u>% by wt.</u>
1309-38-2	Magnetite	ACGIH TLV: OSHA PEL:	5 mg/m ³ (R) 10 mg/m ³	90 – 94
1344-95-2	Calcium (as calcium silicate)	ACGIH TLV: OSHA PEL: OSHA PEL:	10 mg/m ³ 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)	1

^(R) Respirable

SECTION III. HAZARDS IDENTIFICATION

Emergency Overview: Black powder, no odor, may irritate respiratory tract.

Route(s) of Entry: Inhalation and ingestion.

Acute Exposure: Not expected to be irritating to eyes and skin and essentially non-toxic by ingestion. Injury to mucous membrane and skin can occur by direct mechanical action.

Chronic Exposure: Prolonged, frequent, and excessive exposure may result in siderosis (accumulation of iron within the lungs)

Carcinogenicity (NTP) (IARC) (OSHA): No

Eye: Dust may irritate eyes through mechanical action.

Skin Contact: May irritate through mechanical action.

Inhalation: May be irritating to the nose, throat, and respiratory tract.

Ingestion: None expected.

Sign and Symptoms: Irritation of nose, throat and respiratory tract which may result in sneezing, coughing and runny nose

SECTION IV. FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

Skin: Remove with soap and water.

Ingestion: Contact a physician.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

SECTION V. FIRE FIGHTING MEASURES

NFPA Hazard Classification: Health Hazard: 0 Fire Hazard: 0 Reactivity: 0

Flash Pt: Not applicable.

Flammable Limits in Air-Lower: Not applicable.

Flammable Limits in Air – Upper: Not applicable.

Fire Fighting Extinguishing Media: Magnetite is not combustible. Use existing agents that are suitable to surround fire.

Fire Fighting Equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear.

Fire Fighting Instructions: Evacuate area and fight fire from a safe distance.

SECTION VI. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Avoid excessive generation of dust. Vacuum/scoop material into a marked container.

SECTION VII. HANDLING AND STORAGE

Signal Word: Caution

Handling Information: Avoid breathing dust and contact with eyes and skin. Wash thoroughly after handling.

Storage Information: Do not store near strong oxidizers and sources of heat.

SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Control airborne concentrations below the exposure limits.

Eye Protection: Use glasses, goggles or face shield (ANSI Z87.1 or approved equivalent).

Skin Protection: Use gloves and/or protective clothing.

Respiratory Protection: A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. For concentrations up to 10 times the exposure limit, use NIOSH or MSHA approved half- or full-face, air-purifying respirator. For higher concentrations, consult a professional industrial hygienist.

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder, black
Flash Point:	Not applicable
Boiling Point:	Not applicable
Melting Point:	1594°C
Decomposition Temperature:	Not applicable
Specific Gravity:	5.02
Vapor Pressure:	Not applicable
Solubility in Water:	Slight
Molecular Weight:	231.53
pH:	4-8 (in aqueous suspension)

SECTION X. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: None known.

Hazardous Decomposition Products: Under fire condition irritating and/or toxic aerosols may be present.

Hazardous Polymerization: Will not occur.

SECTION XI. TOXICOLOGICAL INFORMATION

Toxicology Tests:

Test : 1

LD/LC : LD₅₀

Test Type : Acute

Test Route : Oral

Test Species : Rat

Results Amounts : >5000 mg/kg

Eye Irritation: None expected other than by mechanical irritation.

Inhalation Toxicity: As with all dusty materials, inhalation may cause respiratory irritation, sneezing, coughing and runny nose

Reproduction: EPA Genetox Program 1988, Negative: TRP reversion (RTECS).

SECTION XII. DISPOSAL CONSIDERATIONS

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

SECTION XIII. TRANSPORT INFORMATION

DOT: Not Regulated

SECTION XIV. REGULATORY INFORMATION*US Federal***RCRA:** Not Listed.**Clean Air Act:** Not listed in Hazardous Air Pollutants in CAA Section 112(b).**Clean Water Act:** Not listed in 40 CFR § 116.4.**Safe Drinking Water Act:** Not listed in 40 CFR § 141.62.**TSCA:** The chemicals in this product may be subject to TSCA**EPCRA, SARA Title III, Section 313** (chemicals subject to reporting requirements, see Section II for CAS number and percentage in mixture): Not listed.**CERCLA Hazardous Substances:** Not listed.**DOT:** See Section XIII TRANSPORT INFORMATION**SECTION XV. OTHER INFORMATION****Prepared By:** Department of Occupational Health and Safety
Freeport-McMoRan Corporation**Reason for Revision:** May 5, 2009: Amended to reflect change in ownership; review of technical data, verification of exposure limits; update of transportation and environmental information**Disclaimer:** This information is based on available scientific evidence known to Freeport-McMoRan Corporation. It is provided solely for compliance to the Hazard Communication Standard. 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. This information is furnished without warranty, expressed or implicit.