

**SAFETY DATA SHEET****SECTION 1 - IDENTIFICATION**

Product Name: Magnetite
Chemical Family: Mineral, Oxide of (1) Iron (Magnetite), Iron Oxide
Product Use: Coalfloat, Water Treatment, Aggregate, Fertilizer, Ballast, Heavy Media
Supplier/Manufacturer's Name: Universal Minerals, Inc.
Address: 510 Bering Drive, Suite 455, Houston, Texas 77057
Emergency Phone: 1-832-530-4545
Business Phone: 1-832-530-4545
Web Site: www.universalminerals.com

SECTION 2 - HAZARDS IDENTIFICATION(S)**REGULATORY INFORMATION**

According to osha 29 cfr I 1910.1200 iron oxide is not "extremely hazardous or toxic". Values are given for permissible exposure limits and threshold values for dusting and fumes. There are no toxic chemicals under sara title iii section 313. This product is listed on tsca inventory. This product has no reportable quantities (rq) under cercla. It is not considered a hazardous waste under cercla or rcra. This product is not listed on the hazardous materials hm 181. Iron oxide does not appear on the hazardous substances list.

CARCINOGENICITY

This product is not listed as a carcinogen by ntp, iarc, osha or acgih as magnetite

AGENCY'S

OHSA: occupational safety & health administration; tsca: e.p.a. toxic substances control act; cercla: comprehensive environmental response compensation and liability act; ntp: national toxicology program; iarc: international agency for research on cancer; acgih: American conference of governmental industrial hygienist; rcra: resource conservation and recovery act - re.p.a.

US OSHA HAZARD SYMBOL

N/A

US DOT SYMBOLS

N/A

PRECAUTIONARY STATEMENT(S)

Magnetite is not considered a hazardous material and is therefore not a controlled substance. Magnetite is a naturally occurring substance and is inert, non-corrosive, non-explosive, non-oxidizing and non-toxic



SAFETY DATA SHEET

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity: Iron Oxide 72%
Common Name: Magnetite
Numbers of Identity CAS- 1309-38-2
Impurities: < 1%

Chemical Identity Oxygen 27%
Common Name: oxygen
Numbers of Identity CAS- 7782-44-7

US OSHA HAZARD SYMBOL US DOT SYMBOLS

Non- Regulated

SECTION 4 - FIRST AID MEASURES

Eye Contact: Flush eyes with plenty of water. Get medical attention if irritation develops or persists
Skin Contact: Wash with soap or mild detergent and large amounts of water
Inhalation: If adverse effects occur, remove to uncontaminated area.
 Give CPR if not breathing, get immediate medical attention
Ingestion: Iron oxide is not know to cause problems if ingested

Medical Conditions aggravated By Exposure: Respiratory
Symptoms / Effects: Difficulty breathing, chills, fever, nausea, vomiting, diarrhea, chest pain, headache, hyperactivity
Chronic: None Known

SECTION 5 - FIRE FIGHTING MEASURES

Fire Extinguishing Materials: Use extinguishing agents appropriate for surrounding fire.
Flash Point: Not Applicable
Autoignition: Not Applicable
Flammable Limits: Lower (LEL): NA Upper (UEL): NA
Unusual Fire and Explosion Hazards: Negligible fire hazard
Explosion Sensitivity to Mechanical Impact: Not Sensitive
Explosion Sensitivity to Static Discharge: Not Sensitive
Special Fire-Fighting Procedures: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.



SAFETY DATA SHEET

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** A NIOSH approved air-purifying respirator with approved cartridge or canister may be appropriate under extreme circumstances where airborne concentrations are expected to exceed exposure limits with little to no ventilation. Wear protective clothing, safety glasses, and gloves.
- Spills:** Keep out of water supplies and sewer, clean up residue with high efficiency particulate vacuum. Dispose of material in accordance with local, provincial and federal regulations. Material may be reclaimed or salvaged for further use. Regulation 40 CFR 261 states that when disposed of this material is not hazardous waste.

SECTION 7 - HANDLING AND STORAGE

- Work Practices and Hygiene Practices:** Avoid contact with eyes and ingestion. Make sure that work areas have some form of ventilation or fresh air available.
- Storage and Handling Practices:** Store and handle in accordance with all current regulation and standards. Store outside or in a detached building. Avoid creating dust, contact with eyes, skin and clothing.

SECTION 8 - EXPOSURE CONTROLS-PERSONAL PROTECTION

Exposure Limits/Guidelines

Chemical Name	CAS#	ACGIH TWA	OSHA TWA	SWA
Iron Oxide	1309-38-2	5 mg/m3	10mg/m3	Not Listed
Oxygen	7782-44-7	Not Listed	Not Listed	Not Listed

- Ventilation and Engineering Controls:** Use with adequate ventilation to ensure exposure levels are maintained below exposure limits. Use local exhaust ventilation to control airborne dust. Ensure eyewash stations are available near where this material is used.
- Respiratory Protection:** A NIOSH approved air-purifying respirator with approved cartridge or canister may be appropriate under extreme circumstances where airborne concentrations are expected to exceed exposure limits.
- Eye Protection:** Wear appropriate splash resistant safety glasses
- Hand Protection:** Wear appropriate chemical resistant gloves
- Body Protection:** Wear appropriate chemical resistant clothing



SAFETY DATA SHEET

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid, Grey to Black, Powder
Odor:	Odorless
Odor Threshold (PPM):	Not Applicable
pH:	4 to 8
Freezing Point:	Not Applicable
Boiling Point:	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Explosive Limits:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Specific Gravity:	5
Solubility(ies):	Insoluble
Auto-Ignition Temperature:	Not Applicable
Decomposition Temperature:	Not Applicable
Melting Point:	2851 F (1566 C)
Viscosity:	Not Applicable
Particle Size:	50 - 100 -325 Mesh

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	None
Stability:	Product is stable
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	Temps above 2851 F (1566 C)
Materials With Which Substance is Incompatible:	None
Decomposition Products:	Will not decompose

SECTION 11 - TOXICOLOGICAL INFORMATION

Irritancy of Product:	Respiratory tract, skin, and eye irritation.
Sensitization of Product:	This product is not considered a sensitizer.
Reproductive Toxicity Information:	This product does not effect the human reproductive system.
Toxicity Data:	None
Suspected Cancer Agent:	Not considered to be a Carcinogen by NTP, IARC, OSHA, MSHA or ACGIH

**SAFETY DATA SHEET****SECTION 12 - ECOLOGICAL INFORMATION****All Work Practices Must be Aimed at Eliminating Environmental Contamination Effects of Chemical On Aquatic Life:**

Not evident that this product has any impact on aquatic life.

Degradation & Persistence: Not Biodegradable

Movement In Soil: Little to no penetration in soil and groundwater. Will not cause adverse ecological effects

Effect of Material On Plants or Animals: Has no effect on plants or animals

SECTION 13 - DISPOSAL CONSIDERATIONS

Preparing Material For Disposal: Disposal must comply with appropriate Federal, State, and local regulations and agency's

SECTION 14 - TRANSPORTATION INFORMATION

Shipping Name: Magnetite

Hazard Class: Not Applicable

Identification Number: Not Applicable

Packing Group: Not Applicable

Label: Not Applicable

**SAFETY DATA SHEET****SECTION 15 - REGULATORY INFORMATION****REGULATORY INFORMATION**

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SECTION 16 - OTHER INFORMATION

Date of Preparation: August 10, 2016

Date of Last Revision: August 10, 2016

Disclaimer:

All information presented is given in good faith based upon sources and tests believed to be reliable but not guaranteed. It is the end user's full responsibility to accept all risks for handling, storage, and use of this product. Universal Minerals, Inc. assumes no legal responsibility for the use or misuse of this product or assumes no legal responsibility for the use or reliance on this data. This material safety data sheet has been constructed to the best of Universal Minerals, Inc's knowledge based on resources and data available.