



SAFETY DATA SHEET


Effective Date: 06/01/24
Replaces: June 2018

Ilmenite

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ilmenite		CAS #: Mixture
Synonyms/Common Names: Black sand, Ferrous (Iron) Oxide	Chemical Name: Ilmenite, Iron Titanium Oxide FeTiO ₃	
Manufacturer/Contact Info: Teichert Aggregates PO Box 15002 Sacramento, CA 95851	General Phone Number: (916) 484-3011 (8-5, PST, M-F)	
	Emergency Phone Number: (800) 287-7383	

SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
May cause irritation due to abrasion effects. May cause respiratory irritation.	
OSHA REGULATORY STATUS	
This product is considered hazardous under Hazard Communication 29 CFR 1910.1200 (OSHA) and 8CCR §5194 (Cal/OSHA)	
POTENTIAL HEALTH EFFECTS	
Routes of Exposure: Inhalation. Skin contact, Eye contact.	
Eye Contact: May cause irritation through mechanical abrasion.	
Skin: May cause irritation through mechanical abrasion.	
Inhalation: Inhalation of high concentrations may result in transient irritation and coughing. Prolonged and repeated exposure to high concentrations of respirable silica (quartz) dust could lead to lung disease including chronic pulmonary obstructive disease and silicosis.	
Ingestion: Ingestion may cause gastrointestinal irritation and malaise. However, ingestion is not likely to be a primary route of occupational exposure.	
TARGET ORGANS	
Respiratory system, lungs.	
CHRONIC EFFECTS	
Chronic inhalation of high concentrations of iron oxide fumes or dust may lead to benign pneumoconiosis (siderosis). Prolonged and repeated exposure to high concentrations of respirable silica quartz could lead to lung disease including chronic pulmonary obstructive disease and silicosis.	
SIGNS AND SYMPTOMS	
Eye, skin and respiratory irritation	
GHS label elements	
	Hazard Statements: May cause irritation of eyes and skin May cause respiratory irritation

POTENTIAL ENVIRONMENT EFFECTS

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

OTHER HEALTH HAZARDS

Pre-existing respiratory conditions, such as bronchitis, may be aggravated by inhalation exposure.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	% by Weight
Ilmenite	12168-52-4	<90
Quartz (Silica Crystalline) ⁽¹⁾	14808-60-7	<10

Comments: (1) Quartz is a naturally occurring form of crystalline silica. Composition varies naturally.

SECTION 4. FIRST AID MEASURES**Eyes:**

Flush thoroughly with water. If irritation occurs, get medical assistance.

Skin:

Wash area with soap and water. Get medical attention if irritation develops or persists.

Inhalation:

Remove to fresh air. Get medical attention if any discomfort continues.

Ingestion:

Seek medical advice. If ingestion of a large amount does occur, call a poison control center immediately. However, ingestion of small amounts of the material is not expected to pose a significant health hazard. Small amounts not expected to pose a health hazard.

Notes to Physician:

Keep victim under observation. Symptoms may be delayed. Pre-existing respiratory conditions, such as bronchitis may be aggravated by inhalation exposure.

General Advice:

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5. FIRE FIGHTING MEASURES**Flammable Properties:**

Concentrated suspensions of fine particles in air may be ignitable/explosive.

Flashpoint (method used):

Product: NE

Flammable Limits in Air (% volume in air):

Not available	LEL: NE	UEL: NE
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Extinguishing Media:

Water fog. Foam. Carbon dioxide (CO₂).

Protection of Firefighters:

Cool containers with flooding quantities of water until well after fire is out.

Specific Methods:

Containers close to fire should be removed or cooled with water.

SECTION 6. ACCIDENTAL RELEASE MEASURES**Personal Precautions:****Avoid inhalation of dust.**

Acute: Airborne particles can cause eye irritation. Inhalation of very high levels of airborne dust may produce respiratory irritation and coughing.

Chronic: None unknown

Environmental Precautions:

Do not contaminate water sources or sewer.

Methods for Clean Up:

Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation.

SECTION 7. HANDLING AND STORAGE

Handling:

Avoid inhalation of dust and contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after handling. Avoid release to the environment.

Storage:

Use care in handling/storage. Store in accordance with local, state and federal regulations.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	OSHA/MSHA Permissible Exposure Limit (PEL)	Cal/OSHA Permissible Exposure Limit (PEL)	ACGIH Threshold Limit Value (TLV)
Particulates (dust)	5 mg/m ³ (respirable) as particulate NOR 15 mg/m ³ (total dust) as particulate NOR	5 mg/m ³ (respirable) as particulate NOR 10 mg/m ³ (total dust) as particulate NOR	3 mg/m ³ (respirable) 10 mg/m ³ (inhalable)
Crystalline Silica (Quartz, Cristobalite, Tridymite) (respirable dust containing silica)	10 mg/m ³ / (%SiO ₂ +2) (respirable particulate containing silica) OSHA PEL for cristobalite and tridymite is ½ of the calculated value for quartz.	0.1 mg/m ³ (respirable quartz) 0.05 mg/m ³ (respirable cristobalite and tridymite)	0.025 mg/m ³ (respirable quartz and cristobalite)
Total dust containing silica	OSHA: 30 mg/m ³ / (%SiO ₂ +2) (total particulate containing silica) MSHA: 30 mg/m ³ / (%SiO ₂ +3)	0.3 mg/m ³ (total dust, quartz)	NE

Engineering Controls:

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust.

PERSONAL PROTECTIVE EQUIPMENT:**Eye / Face Protection:**

Wear approved safety goggles.

Skin Protection:

Wear suitable protective clothing and gloves. Leather work gloves are appropriate.

Respiratory Protection:

In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

General Hygiene Considerations:

Keep away from food, drink and animal feeding stuffs. Observe good industrial hygiene practices. As need wear coveralls and/or work clothing that minimize skin contact use work practices that minimize routine respiratory, skin and eye contact.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance & Odor:**

Fine, black particulate with metallic luster, Odorless

pH: Not available	Melting Point: Not available	Boiling Point: Not available
Evaporation Rate: Not available	Vapor Pressure: Not available	Vapor Density: Not available
Specific Gravity: 4.5 – 5	Solubility (water): 0	

SECTION 10. CHEMICAL STABILITY & REACTIVITY INFORMATION**Chemical Stability:**

Stable at normal conditions

Conditions to Avoid:

None known

SECTION 15. REGULATORY INFORMATION [NOTE: NOT INTENDED TO BE ALL-INCLUSIVE]**US Federal Regulations:**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Not applicable

Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III:**Hazardous Categories:**

Immediate Hazard – Yes
Delayed Hazard – Yes?
Fire Hazard – No
Pressure Hazard – No
Reactivity Hazard – No

Section 302 Extremely Hazardous Substance:

No

Section 311 Hazardous Chemical

Yes

California Proposition 65:

WARNING: This product can expose you to chemicals including crystalline silica, which are known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

State Regulatory Lists:

The following materials/components are specifically listed by individual states. For details on regulatory requirements, you should contact the appropriate agency in your state:

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Quartz [Silica crystalline] (14808-60-7) Listed

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz [Silica crystalline] (14808-60-7) Listed: October 1, 1988 Carcinogenic

SECTION 16. OTHER INFORMATION**Disclaimer of Liability:**

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