

Material Safety Data Sheet

Ilmenite Sand

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Names : ILMENITE SAND

Other Names : Ilmenite

Chemical Formula : TiO_2

Company Identification

Company :

Address :

**LAGUNA CLAY COMPANY
14400 Lomitas Avenue**

Telephone Number : **City of Industry, CA 91746**

Fax Number : **(800) 452-4862 or (626)330-0631**

Emergency No :

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients (typical)</u>	<u>CAS Number</u>	<u>Weight %</u>
Ilmenite		93 - 96%
Rutile/Leucoxene		0.5 - 5%
Zircon	14940-68-2	0.1 - 0.5%
Monazite		0.2 - 0.3%
Staurolite	12182-56-8	<1%
Quartz	14808-60-7	Up to 0.5%

3. HAZARDS IDENTIFICATION

Not classified as hazardous according to US Agency for Toxic Substances and Disease Registry and the American Conference of Governmental Industrial Hygienists

Ilmenite Sand

4. FIRST AID MEASURES

Swallowed First aid is unlikely to be required, but if necessary wash mouth out with water ensuring the mouthwash is not swallowed. Seek medical attention as a precaution if discomfort occurs.

Eye Hold eyelid open and flush with plenty of clean water. Continue for at least 15 minutes or until grit is removed. Seek medical attention if soreness or irritation persists.

Skin Gently remove contaminated clothing to avoid generating dust. Wash material from the skin. If repeated contact results in skin irritation, seek medical advice. Launder clothing before re-use.

Inhaled Move to fresh air. Blow nose to remove particulates from nasal passages. If any adverse reaction develops, seek medical attention.

First Aid Facilities Eye wash facilities.

Advice to Physician Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flashpoint : Not applicable
Flammability Limits : Not applicable

General Hazard This product is not flammable and does not support combustion.

Extinguishing Media Use media suitable for the material that is burning.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal Wear safety equipment as for normal handling. Avoid generating dust. Vacuum up if possible, otherwise sweep up and re-cycle. If the spilled product is not suitable for re-use, damp down, collect and where possible return to manufacturer for re-processing. Otherwise dispose of to an approved landfill site and cover with clean fill in accordance with State/Local Council regulations.

Ilmenite Sand

7. EXPOSURE CONTROLS/PERSONEL PROTECTION

Engineering

Controls Ventilation requirements will depend on handling methods and the amount in use, but should be sufficient to maintain dust levels below exposure limits. Points of dust generation such as conveyor and hopper discharges should be equipped with an effective extraction system.

Personal

Protection Safety glasses with side shields or goggles. If risk of inhaling dust is present wear, at minimum, a dust mask (disposable or cartridge type).

Exposure Standards (Occupational)

Inhalable general nuisance dust:
¹ TLV - TWA: 10mg/m³ (ACGIH)

Respirable quartz dust:
TLV - TWA: 0.1mg/m³ (ACGIH)

² Radiation exposure:

Occupational exposure should be as low as reasonably achievable, (ALARA principle), but should not exceed a total of 100 milli-seiverts over five consecutive years. (ICRP)

¹ TLV (Threshold Limit Value) is the exposure standard term used by American Conference of Governmental Industrial Hygienists (ACGIH)

² Recommendation of the International Commission on Radiological Protection, ICRP Publication 60, Annals of the ICRP Vol 21, No 1 - 3 1991

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (Form) : Black free running sand, odourless and tasteless
Melting Point : 1050° C
Vapour Pressure : Not volatile
Evaporation Rate : Not volatile
Specific Gravity : 4.3 - 4.6
Solubility in Water : Insoluble
pH : Neutral
Bulk Density : 2400 - 2700 kg/m³
Grain size (AFS No) : 75 - 90

Zirconite Sand

10. STABILITY AND REACTIVITY

Reactivity : Inert

Chemical Stability : Stable

Incompatibilities : None in normal or expected use.

Decomposition : Decomposition will not occur.

11. TOXICOLOGICAL INFORMATION

No toxicological information available.

12. ECOLOGICAL INFORMATION

The material is unlikely to cause any environmental damage. It is insoluble in water and is unlikely to contaminate waterways or food chains.

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with Federal, State and Local Council regulations. If approved, may be transferred to an approved landfill site.

Note: Many states are developing new regulations for the disposal of waste containing Naturally Occurring Radioactive Materials (NORM) or Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) above background levels. Consult and comply with current regulations.

14. TRANSPORT INFORMATION

May be transported normally as a non-hazardous material.

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status : Reported/Included

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : No

Chronic : Yes

Fire : No

Reactivity : No

Pressure : No

Ilmenite Sand

LISTS:

SARA Extremely Hazardous Substance : No
CERCLA Hazardous Material : No
SARA Toxic Chemical : No

16. OTHER INFORMATION

For further information see Iluka Ilmenite Product Specification Sheets

Note: This product contains small quantities of quartz and radionuclides, both known to the State of California to cause cancer.

Preparation Information

This MSDS has been prepared by Iluka Resources Inc, Safety Health and Environment Department.

Revision Number : US - 1
Date of Issue : January 2000
Replaces: : None