Dakshinak Minerals LLP
Plot No.11, 4th Floor, The Mahaveer Water Mark, Kondapur, Ranga Reddy District,
Hyderabad 500084, Telangana State, India.
Web: www.dakshinak.com | E-mail: sales@dakshinak.com

1. IDENTIFICATION

Product Names: Ilmenite Sand

Other Names: Black sand, Ilmenite concentrate, Ilmenite powder

Uses: Ilmenite is used predominantly as raw material for titanium dioxide pigment for paints and cosmetics. Ilmenite is also used in the manufacturing of welding electrodes.

Producer Name: Dakshinak Minerals LLP

E-mail: sales@dakshinak.com

Web: www.dakshinak.com

2. HAZARDS IDENTIFICATION

Ilmenite sand is non-hazardous and non-dangerous cargo according to criterion NOHSC: 1008(2004) since it is a natural mineral available in inland and seashore deposits.

Ingredients (Typical)	CAS Number	Weight
Ilmenite	103170-28-1	60-66%
Rutile	1317-80-2	23-28%
Quartz	14808-60-7	0.6-1.0%
Alumina	1344-28-1	0.8-1.2%
Magnesium oxide	1309-48-4	< 2.0%
Chromium Oxide	1308-38-9	<1.5%
Manganese Oxide	1344-43-0	<1.0%

4. FIRST AID MEASURES

Swallowed:	First aid is unlikely to be required but, if necessary, wash mouth with water, ensuring the rinse is not swallowed. Give one or two glasses of water to drink. Seek medical attention if a large quantity has been swallowed.
Inhaled:	Blow nose to remove particulates from nose. Move to area with fresh air. Seek medical attention if adverse reaction develops.
Skin:	Remove contaminated clothing gently to avoid creating dust. Wash skin. If skin becomes irritated, seek medical attention. Launder affected clothing before re-use.
Eye:	Hold eyelid open and flush with clean water. Continue until grit is removed. Seek medical attention if irritation or soreness persists.

Acute

Swallowed:	Non-toxic. No known detrimental effect from accident ingestion as may occur during normal handling. Ingestion of large amounts may cause irritation to the gastro-intestinal system due to abrasiveness.
Inhaled:	Mainly regarded as nuisance dust but may be irritating if inhaled at high concentrations. May cause coughing and/or sneezing.
Skin:	Low hazard.
Eye:	Solid and dust can be moderately irritating due to abrasiveness.

Chronic

Radiation:	In common with many minerals, ilmenite contains naturally occurring radioactive elements of the uranium and thorium series. The uranium and thorium levels of RZ Resources Ltd rutile is very low, compared with products produced from most mineral sand deposits elsewhere in Australia. Assays of ilmenite have given levels for Uranium of < 100ppm, and for Thorium of < 100ppm. The main radiological hazard is internal exposure to alpha particles given off in small amounts in inhaled dust.
Silica:	Crystalline silica is a known cause of lung fibrosis (silicosis). It has also been classified as a human carcinogen. Ilmenite contains small amounts of free quartz and precautions should be taken to avoid inhaling the dust.
First Aid Facilities:	Eye wash station
Doctor Treatment:	Treat symptomatically

5. FIRE FIGHTING MEASURES

Non-flammable and non-combustible. Use suitable firefighting measures for the surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Not relevant
Containment and Clean-up:	Wear safety equipment for normal handling. Avoid generating dust. Vacuum up if possible; otherwise, sweep up and recycle. Prevent from entering drains and waterways. If the spilled product is not suitable for re-use, dispose off to an approved landfill site and cover it with clean fill.

7. HANDLING AND STORAGE

Handling: Dust generation should be minimized when handling. Wash thoroughly after handling.

Storage: Storage areas should be ventilated.

8. EXPOSURE CONTROLS and PERSONAL PROTECTION

Ingredient	TWA (mg/m^3)	STEL (mg/m^3)
Titanium dioxide	10	-
Respirable silica (quartz)	0.05	-
Alumina	-	-
Magnesium oxide	10	-
Chromium (III) compounds as Cr	0.5	-
Manganese compounds as Mn (CAS# 7439-96-5)	1	-

Biological Limit Values: No information

Engineering Controls: Ventilation requirements will depend on handling methods and the amounts in use, but should be sufficient to maintain dust levels below exposure limits.

Personal Protective Equipment: Safety glasses or goggles.

If there is a risk of inhaling dust, wear an approved Class P1 or better respirator.

9. PHYSICAL CHEMICAL PROPERTIES

Appearance: Black and brown sand

Odour: Odourless

pH: Neutral

Vapour Pressure: Not applicable

Boiling Point/Range: Not applicable

Melting Point: Ilmenite 1800°C, Rutile 1850°C

Solubility: Insoluble

Bulk Density: 2700 kg/m^3

Flash Point: Not applicable

Flammability Limits: Not applicable

10.STABILITY AND REACTIVITY

Reactivity: Inert

Chemical Stability: Stable

Incompatible Materials: Strong acids

Decomposition Products: Decomposition will not occur

11.TOXICOLOGICAL INFORMATION

Based on testing performed on the three major constituents, not considered as hazardous to human health according to criteria of GHS (UN 2017).

12.ECOLOGICAL INFORMATION

Based on testing performed on the three major constituents, does not meet the conditions to be considered “harmful to the marine environment” under the revised MARPOL Annexed V

13.DISPOSAL CONSIDERATION

If not reusable, dispose of at approved landfill site. Disposal must be in accordance with Commonwealth, State and local government regulations.

14.TRANSPORT INFORMATION

Transport may be regulated in some countries although the product is classified as non-dangerous goods.

IATA : NIL
ADR : NIL
IMO : NIL
UN No. : NIL

15.REGULATORY INFORMATON

This product is natural and dry mineral and the material collected from inland and seashore. It is non- hazardous and non- dangerous cargo and does not require any special precautions.

16.OTHER INFORMATION

The above information is believed to be accurate, but is not warranted with respect to the accuracy of the information or recommendations. As per the work safety rule, each and every user should reconsider the above information while using the product in the refractory and glass industry under the supervision of Safety Department.

-X-X-X