TRIMEX SANDS

MATERIAL SAFETY DATA SHEET
SILLIMANITE

1. PRODUCT AND COMPANY IDENTIFICATION

Product identification		
Product names	:	SILLIMANITE SAND
Company Identification		
Company	:	Trimex Sands Private limited
Address	:	Trimex towers No.1 .Subbaraya Avenue C.P.Ramasamy road Chennai -600 018. India.
Telephone Number	:	91 44 24988822
Fax Number	:	91 44 24986047

2. COMPOSITION /INFORMATION INGREDIENTS

Typical analysis Chemical

Al2O3	-	57 – 58 %
SiO2	-	37 – 39 %
Fe2o3	-	0.5 – 0.8 %
TiO2	-	0.2 – 0.6 %
LOI	-	0.5 – 0.7 %
Na2O	-	0.25 – 0.5 %
K2O	-	0.2 -0.4 %

3. HAZARDS IDENTIFICATION

Eye	Particles or dust is moderate eye irritant due to its abrasive action.
Inhalation	May be regarded as nuisance dust but can be irritating at high concentrations and may cause symptoms such as coughing and sneezing. The TLV (TWA) for occupational exposure nominates 10 mg/ m^3 as total dust and 5 mg/ m^3 as reparable dust. It is advised that local exhaust ventilation be provided to maintain dust concentrations

	below 8mg/ m^3.
Skin	Non-hazardous.
Ingestion	There are no known hazards caused by accidental ingestion of small amount such as might occur during normal handling. Ingestion of larger quantities might cause irritation of the gastro-intestinal system as a result of abrasive action.
Radiation	Sillimanite contains trace (ppm level) amount of the naturally occurring radioactive substances such as Uranium & Thorium. However the concentration of the Uranium and Thorium are not sufficient for Sillimanite to be classified as a radioactive substance under International Atomic Energy Agency (IAEA) Regulation for the safe transport of radioactive material.

4. FIRST AID MEASURES

Eye	Hold eye as open and rinse continuously with a gentle stream of clean running water for at least 15 minutes. Seek medical attention if any irritation or soreness of eye persists.
Inhalation	Remove the victim from source of exposure into fresh air and seek medical attention if any symptoms persist.
Skin	No specific first aid is required for skin contact. Remove clothing &wash skin with soap and /or water. Seek medical attention if any irritation or soreness of the skin develops.
Ingestion	First aid is unlikely to be required but if necessary rinse mouth with water ensuring that mouthwash is not swallowed and seeks medical attention as a precautionary measure if large amounts have been ingested.

5. FIRE FIGHTING MEASURES

This is a non-combustible material. Use whatever protective equipment and extinguishing agent that is suitable for the primary cause of fire.

6. ACCIDENTAL RELEASE MEASURES

Wear safety equipments as for normal handling, avoid generating dust. Sweep or vacuum up, recycle / reuse or dispose to landfill subject to local regulations. Transport is not regulated and no specific storage requirements.

7. HANDLING AND STORAGE

Storage	Transport is not regulated and there is no specific storage requirement but storage should be designed to minimize creation of the dust.

Spillage	Wear protective equipment as specified for handling. Sweep or vacuum up and reuse or dispose. Avoid generation of dust.
Waste disposal	Disposal to land fill subject to local regulations.
Fire explosion	Incombustible
Fire extinguishing	Use whatever protective equipments and extinguishing agent are suitable for primary cause of fire.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation	Ventilation requirement will depend upon handling methods and amount in use but extraction or make up air may be required to minimize dust layers/levels below exposure limits.
Protective equipments	Safety goggles or glasses. A dust type respirator may be required to prevent ingestion.
TLV (TWA)	10 mg/m^3 as total dust.
TLV (TWA)	5 mg/ m^3 as reparable dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical formula	$Al_2 O_3Si O_2$	Flash point	None
Grain Size	Solid in 75 –300 micron.	Explosion limit	Not pertinent
Co lour	Pale White	Solubility- water)	Insoluble
Odor	Odorless	Vapors pressure	Not pertinent
Melting point	1550-1600 ^0C	Vapors density	Not Applicable
Evaporation rate	Not Pertinent	Hardness	6.0 –7.0 in Mohr's Scale
Specific gravity	3.20- 3.25	Crystal system	Orthorhombic
Bulk density	1950 - 2050 kg/m^3	% Volatiles	None
pH	6 - 7	Flammability	Non combustible

10. STABILITY AND REACTIVITY

Chemical stability	:	Stable
Reactivity	:	Inert
Incompatibilities	:	None in normal or expected use.
Decomposition	:	Decomposition will not occur.

11. TOXICOLOGICAL INFORMATION

Non- toxic

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12. ECOLOGICAL INFORMATION

The matter is unlikely to cause any environmental damage if handled, used and disposed off in the approved manner. It is insoluble in water and unlikely to contaminate waterways or enter the food chains.

13. DISPOSAL CONSIDERATIONS

This is a non- hazardous material; disposal must be in accordance with federal, state and local regulations. Consult and comply with current regulations. If approved, may be transferred to an approved landfill site.

14. TRANSPORT INFORMATION

Transport is not regulated & may be transported as a non-hazardous material. Trucks transporting/carrying bulk material should be covered to prevent dust generation.

15. REGULATORY INFORMATION

Labeling: May be required in the USA if quartz exceeds 0.10 %.

Radiological protection: The regulations pertaining to radiological protection vary from country to country. It is the responsibility of the buyer to ensure that those are met in accordance with his/her country law.

16. OTHER INFORMATION

MSDS data issued Trimex Sands Private Limited,
Disclaimer Tel: 91-44-24988822

When appropriate.
The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. The requirement or recommendation of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product shall take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication, and will be undated as and when appropriate.