



**SOUTHERN IONICS MINERALS, LLC (SIM)**  
**SAFETY DATA SHEET**

SDS NO. 005  
Effective Date: 12/01/2015  
Revision Date: 09/23/2016

**I. Product and Company Information**

<b>SII Product Name(s):</b>	Ilmenite Sand	<b>Synonym:</b>	Georgia Ilmenite
<b>Chemical Name:</b>	Ilmenite	<b>CAS Number:</b>	103170-28-1
<b>Manufacturer's Name:</b> Southern Ionics Minerals, LLC 13291 Vantage Way, Suite 103 Jacksonville, FL 32218 Web Site <a href="http://www.simineralsllc.com">www.simineralsllc.com</a>		<b>Emergency Contacts:</b> For Emergency Incident Information Call CHEMTREC at 1-800-424-9300 CHEMTREC CCN - 20596	

**II. Hazard Identification**

<b>OSHA HCS / GHS Classification(s):</b>		<b>Hazard Statement(s):</b>	
NOT CLASSIFIED AS HAZARDOUS		No known significant effects or critical hazards	
<b>Signal Word:</b>	<b>Precautionary Statement(s):</b>		
No signal word			
<b>Symbol(s)</b> No symbol	<b>Prevention:</b>	<b>Not applicable</b>	
	<b>Response:</b>	<b>Not applicable</b>	
<b>Additional Label Information:</b>	Ilmenite sand contains a small amount of free quartz (up to 0.5%) and precautions should be taken to avoid inhaling the dust. The normal grain size of the product precludes it from being an inhalation hazard.		
<b>Hazards Not Otherwise Classified:</b>	Handling and/or processing of this material may generate dust which can cause mechanical irritation of the eyes, skin, nose and throat.		

**III. Composition / Information on Ingredients**

<b>Chemical Name:</b>	<b>CAS Reg #'s</b>	<b>%</b>
Ilmenite	103170-28-1	93 – 96%
Leucoxene	12173-81-8	0.5 – 5 %
Rutile	1317-80-2	< 5 %
Zircon	14940-68-2	0.1 – 0.5 %
Staurolite	12182-56-8	< 1%
Quartz (Crystalline Silica)	14808-60-7	Up to 0.5 %
Monazite	1306-41-8	0.2 – 0.3 %
<b>Comments:</b>	Respirable Crystalline Silica < 0.01%	

#### IV. First Aid Measures

<b>Eyes:</b>	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Remove any contact lenses. If eye irritation persists get medical advice/attention.
<b>Dermal / Skin:</b>	Remove contaminated clothing to avoid generating dust. Wash material from the skin. If repeated contact results in skin irritation, get medical advice/attention. Launder clothing before reuse.
<b>Inhalation:</b>	Move to fresh air immediately. Blow nose to remove particles from nasal passages. If any adverse reaction develops, seek medical attention.
<b>Ingestion:</b>	There are no known hazards resulting from accidental ingestion of Ilmenite sand as may occur during normal handling. Consult a physician if necessary.

#### V. Fire Fighting Measures

<b>NFPA Hazard Rating:</b>	Health (Blue)	Fire (Red)	Reactivity (Yellow)	Special Instructions (White)
	1	0	0	
<b>NFPA Hazard Classification: 0 = Least 1 = Slight 2 = Moderate 3 = High 4 = Extreme</b>				
<b>Extinguishing Media:</b>	Product does not burn. Use extinguishing media suitable for the surrounding fire.			
<b>Special Firefighting Procedure:</b>	No fire or explosion hazard exists.			
<b>Specific hazards arising from the chemical:</b>	Use firefighting methods appropriate to local circumstances and the surrounding environment.			

#### VI. Accidental Release Measures



<b>Precaution if Spilled or Released:</b>	Use personal protective equipment recommended in SECTION 8 during clean-up. Avoid generating dust. Absorb, sweep up, and place in container for re-use or disposal.
<b>Neutralizing Chemicals:</b>	Reduce dust spreading with a water spray.
<b>Environmental Precautions:</b>	Prevent product from entering drains and waterways.

#### VII. Handling and Storage

<b>Handling:</b>	Avoid contact with eyes. Avoid creating dust in handling, transfer or clean-up. Avoid breathing dust. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Storage:</b>	This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

#### VIII. Exposure Control / Personal Protective Equipment

<b>Component Workplace Control Parameters:</b>				
<b>Components:</b>	<b>CAS-No.</b>	<b>Value</b>	<b>Parameters</b>	<b>Basis</b>
Silica, Crystalline Quartz	14808-60-7	TLV	0.1 mg/m <sup>3</sup>	ACGIH (respirable fraction)
Titanium Dioxide	13463-67-7	TLV	10 mg/m <sup>3</sup>	ACGIH (total dust)
Zirconium Silicate	14940-68-2	TLV	5 mg/m <sup>3</sup>	ACGIH (as Zr)
<b>Engineering Controls:</b>	Use engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to keep exposures below their respective threshold limit value. If practical, use local mechanical exhaust ventilation at sources of air contamination, such as open process equipment.			
<b>General Hygiene:</b>	Practice good personal hygiene after using this material, especially before eating, drinking, smoking, or using the toilet.			

Personal Protection Equipment:				
<b>Eye:</b>		Wear safety glasses with side shields in normal conditions. Wear dust-proof goggles in dusty conditions.		
<b>Skin:</b>		Wear clothing sufficient to cover the skin, safety shoes, and impervious gloves for hand protection against dry material.		
<b>Respiratory:</b>		Use NIOSH/MSHA approved respiratory protection (air purifying or air supplying) with a type 100 (high efficiency particulate cartridge or canister) where concentrations are above airborne exposure limits.		
<b>HMIS Classification:</b>	Health (Blue)	Flammability (Red)	Physical Hazard (Yellow)	PPE (White)
	1	0	0	See Above
<b>Hazard Classification: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe</b>				

### IX. Physical and Chemical Properties

<b>Physical State:</b>	Solid	<b>pH:</b>	NA
<b>Appearance:</b>	Black free running sand	<b>Odor Threshold:</b>	NA
<b>Odor:</b>	Odorless	<b>Vapor Pressure:</b>	NA
<b>Specific Gravity:(H<sub>2</sub>O=1)</b>	4.2 - 4.6	<b>Melting Point:</b>	1050°C
<b>Vapor Density: (Air=1)</b>	NA	<b>Upper Explosive Limit:</b>	NA
<b>Boiling Point:</b>	NA	<b>Autoignition Temp:</b>	NA
<b>Lower Explosive Limit:</b>	NA	<b>Bulk Density:</b>	2400 to 2700 kg/m <sup>3</sup>
<b>Flash Point:</b>	NA	<b>Grain Size (AFS No)</b>	75 - 95
<b>Solubility in water:</b>	Insoluble	<b>Other:</b>	

### X. Stability and Reactivity Data

<b>Reactivity</b>	This material is considered inert.
<b>Chemical Stability:</b>	Stable at normal conditions.
<b>Conditions To Avoid:</b>	None known.
<b>Incompatible Materials:</b>	None in normal or expected use.
<b>Hazardous products of Decomposition:</b>	None under normal conditions of storage and use.

### XI. Toxicological Information

<b>Routes of Entry:</b>	<input checked="" type="checkbox"/> Eyes <input checked="" type="checkbox"/> Skin <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Inhalation
<b>Sign and symptoms of Exposure:</b>	May cause irritation to eyes, skin, and respiratory passages.
<b>Eye Contact:</b>	Contact may result in mechanical (abrasive) irritation.
<b>Ingestion:</b>	No adverse effects expected for incidental ingestion.
<b>Skin Contact:</b>	Contact may result in mechanical (abrasive) irritation.
<b>Inhalation:</b>	<p>Ilmenite sand contains a small amount of respirable crystalline silica (up to 0.01%) and precautions should be taken to avoid inhaling the dust. The normal grain size of the product precludes it from being an inhalation hazard.</p> <p>Ilmenite sand contains very low levels of naturally occurring radioactive elements of the uranium and thorium series. The main radiological hazard from the product is internal exposure to small amounts of alpha particles given off by inhaled dust. Ilmenite sand is exempt from NRC regulations for source material since it falls under the definition of unprocessed material containing less than 0.05% uranium and thorium.</p>

<b>Carcinogenicity:</b> Respirable Crystalline Silica (Quartz)	<b>NTP</b>	Known	<b>IARC</b>	Group 1	<b>OSHA</b>	
<b>Ingredient Name:</b>	<b>Species</b>		<b>Test</b>		<b>Route</b>	<b>Results</b>
Crystalline Silica (Quartz)	Rat		>11,000 mg/kg		Oral	ALD
Crystalline Silica (Quartz)	Carp		>10,000 mg/L		Aquatic	LC 50
Rutile	Mice		>200 mg/kg		Oral	LD 50
Titanium Dioxide	Rat		>10,000 mg/kg		Oral	LD 50
<b>Comments:</b>						

### XII. Ecological Information

<b>Ingredient Name:</b>	<b>Species</b>	<b>Test</b>	<b>Period</b>	<b>Results</b>
<b>Comments:</b>	This product is not anticipated to cause adverse effects to animal or plant life if released to the environment in small quantities. The material is unlikely to cause any environmental damage. It is insoluble in water and is unlikely to contaminate waterways or food chains.			

### XIII. Disposal Considerations

<b>Waste Disposal:</b>	Recover, reclaim or recycle when practical. Disposal must be in accordance with federal, state, and local regulations. If approved, may be transferred to an approved landfill site. Consult and comply with current regulations regarding disposal of waste containing Naturally Occurring Radioactive Materials (NORM) above background levels.
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### XIV. Transportation Information

<b>Proper Shipping Name:</b>	None allocated				
<b>DOT Classification:</b>	Not regulated by U.S. DOT as a hazardous material				
<b>Identification Number:</b>	NA	<b>Packing Group:</b>	NA	<b>Other Labels:</b>	NA
<b>Comments:</b>	This product is not classified as "dangerous goods" under IAEA SSR 6, IMDG, IATA, Transport Canada and EU transport regulations.				

### XV. Regulatory Information Based on Largest Component (unless listed)

TSCA Status	Yes	SARA 302 TPQ	Not Listed
Europe EINECS	Yes	SARA 304 RQ	Not Listed
Korea KECI	Yes	SARA 313 List	Not Listed
Taiwan TCSI	Yes	CERCLA (RQ)	Not Listed
China INV	Yes		
		SARA 311/312	<input type="checkbox"/> Acute <input checked="" type="checkbox"/> Chronic <input type="checkbox"/> Fire <input type="checkbox"/> Release of Pressure <input type="checkbox"/> Reactive
<b>International Regulations:</b>			<b>Other Regulations:</b>
			California PROP 65 (Quartz)      Known Carcinogen

### XVI. Other Information

<b>NSF Certification:</b>	
<b>Other:</b>	_____
<b>Revision Notes:</b>	_____
<b>MSDS Replacements:</b>	<u>SIM MSDS Ilmenite Sand Products</u>

**SALES OFFICE**

13291 Vantage Way, Suite 103 Jacksonville, FL 32218  
TEL: 904-741-0090

**For Product Information:**

TEL: 912-647-0301  
**FAX: 904-741-0091**

**IMPORTANT**

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