MATERIAL SAFETY DATA SHEET
SILICA SAND

EFFECTIVE DATE: 01-01-2013

1. IDENTIFICATION OF THE SUBSTANCE/PREP. AND THE COMPANY

PRODUCT NAME: SILICA SAND, QUARTZ SAND
MANUFACTURER'S NAME: Edgar Minerals, Inc.
ADDRESS: 651 Keuka Rd. Edgar FL 32640
PHONE NO.: (352)481-2421 8am–5 pm EST.
FAX NO.: (352) 481-2334

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME: SILICA
PRODUCTS NAME: EDGAR INDUSTRIAL SANDS (VARIOUS GRADES)
CHEMICAL FAMILY: Silicon Dioxide
F**ORMULA:** SiO_2 **CAS No: 1**4808-60-7
WEIGHT: 98-100 % approx.

3. HAZARDS IDENTIFICATION

Edgar Minerals sand is a naturally occurring mineral and contains crystalline silica levels of 98 to 100%.

• **CARCINOGENICITY:** This product contains crystalline silica. Repeated, prolonged inhalation of dust may cause delayed lung injury which may result in silicosis or pneumoconiosis. The International Agency For Research On Cancer in its publication, "IARC Monographs On the Evaluation Of The Carcinogenic Risk To Humans – Silica, Some Silicates, Coal Dust and Para-aramid Fibrils" - Volume 68, 1997, has concluded that there is sufficient evidence of the carcinogenicity of crystalline silica in humans, and has, therefore, classified crystalline silica in, Group 1, Carcinogenic to Humans. The National Toxicology Program's ("NTP's") Ninth Annual Report on Carcinogens 2000, lists crystalline silica (respirable) as a substance which is known to be a human carcinogen. In humans, a number of studies have found an association between lung cancer and exposure to dust containing respirable crystalline silica. In many of these studies, though not all, lung cancer risks were elevated and could not be explained by confounding factors such as cigarette smoking or arsenic or random inhalation. While the IARC working group concluded there was sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or crystobalite, it noted that carcinogenicity in humans was not detected in all circumstances studied.

• **Note:** The state of California requires the following statement:
"Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer"

4. FIRST AID MEASURES

SKIN CONTACT ABSORPTION: Inflammation from contact with open cuts may occur. Wash thoroughly with water.
INHALATION: Short Term: Shortness of breath, coughing associated with inhalation of dust. **Long Term:** May cause silicosis, a chronic disease of the lungs marked by acute fibrosis; may cause cancer. If inhalation occurs move to fresh air, consult physician and/or obtain competent medical assistance as necessary.
EYE CONTACT: Wash eyes with large amount of water or saline solution. If irritation or redness develops, get medical attention.
INGESTION: Consult physician and/or obtain competent medical assistance

5. FIRE-FIGHTING MEASURES

Silica sands are not flammable.

6. ACCIDENTAL RELEASE MEASURES

Silica sand waste is not reactive, flammable or biodegradable. Use conventional means; e.g. sweeping, vacuum, etc.

7. HANDLING AND STORAGE

Avoid dust formation. Keep container tightly closed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

OSHA PEL ACGIH TLV NIOSH TWA

Crystalline Quartz Crystalline Quartz Crystalline Quartz

RESPIRABLE 10mg/m^3/%SiO_2 +2 RESP. 0.025 mg/m^3 (TWA-TLV) RESP. 0.05 mg/ m^3 (TWA-TLV)

RESPIRATORY PROTECTION: Use NIOSH/MSHA/OSHA approved dust respirator if dust is present.
VENTILATION: Local exhaust required for dust removal. Refer to OSHA 1910.24, ASTM, and/or ANSI standards. Do not exceed OSHA PEL or ACGIH TLV.
PROTECTIVE GLOVES & EYE PROTECTION: Impermeable gloves and Eye protective glasses are recommended. NIOSH recommends against wearing contact lenses when working with crystalline silica.

9. PHYSICAL AND CHEMICAL PROPERTIES

MELTING POINT: 1700-1800 ^{o}C
SPECIFIC GRAVITY (WATER=1): 2.65
SOLUBILITY IN WATER: Negligible
% VOLATILE BY VOL: Non-Volatile
BOILING POINT: N/A
APPEARANCE: White to tan granules
ODOR: Earthy smell when wet
VAPOR PRESSURE: N/A

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: None
MATERIALS TO AVOID: None Expected
HAZARDOUS DECOMPOSITION PRODUCTS: None

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS (ACUTE & CHRONIC): May cause eye and skin irritation. Ingestion may cause gastrointestinal irritation, nausea and diarrhea. Long term exposure to high amount of Edgar sand without the approved dust mask may cause chronic cough, silicosis and cancer.

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects: No known effect on environment or expected under normal use.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Edgar sand is not a hazardous waste under RCRA (40 CFR Part 261) Use normal solid waste disposal methods to comply with Federal, State and local regulations.

14. TRANSPORT INFORMATION

Not classified as dangerous material by DOT. No special precautions are required.

15. REGULATORY INFORMATION

Canadian WHMIS: Hazardous product, D2A
CANADIAN DOMESTIC SUBSTANCES LIST: As a naturally occurring substance, Edgar sand is considered to be on the Canadian DSL.
PNCA/CPMA HMIS RATING: Health (2) Flammability (0) Reactivity (0) Personal Protection (E)
U.S. CALIFORNIA PROPOSITION 65: This product contains materials regulated under **California's Safe Drinking Water and Toxic Enforcement Act of 1986**.

16. OTHER INFORMATION

PREPARED BY: TECHNICAL SERVICE DEPARTMENT
TELEPHONE NO.: (352) 481-2421
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