

Material Safety Data Sheet

SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Garnet Sand

Part Number: multiple

Chemical Family: mineral

Manufacturer's Name: Siemens Industry, Inc. - Water Technologies Business Unit

Address: 4669 Shepherd Trail, Rockford, IL 61103

Product/Technical Information Phone Number: (815) 877-3041

Medical/Handling Emergency Phone Number: Call CHEMTREC at 800/424-9300
24 hours a day

Transportation Emergency Phone Number: Call CHEMTREC at 800/424-9300
24 hours a day

Issue Date: April 1, 2000

Revision Date/Revision Number: April 2011/Rev 5

SECTION 2 – COMPOSITION INFORMATION

<u>Chemical Name</u>	<u>Percent by Weight</u>	<u>CAS#</u>
(Fe, Mg) ₃ Al ₂ (SiO ₄) ₃	>94	1302-62-1
Miscellaneous trace minerals, Balance Including quartz (quartz)		14808-60-7

SECTION 3 – HAZARDS IDENTIFICATION

Appearance & Odor: pink to purple in color, no odor

Emergency Overview: Exposure to nuisance dust may cause eye, throat, or lung irritation; coughing; and shortness of breath.

Fire & Explosion Hazards: No special hazards, see Section 5.

Primary Route(s) of Exposure: inhalation, skin and eye contact

Inhalation – Acute Effects: Inhalation of nuisance dust may cause throat or lung irritation, coughing, and/or shortness of breath.

Skin Contact – Acute Effects: Skin contact may cause mechanical abrasion.

Eye Contact – Acute Effects: Eye contact will cause mechanical irritation.

Ingestion – Acute Effects: No known effects, however, ingestion is not recommended.

SECTION 4 – FIRST AID MEASURES

Inhalation First Aid: Remove affected person from area to fresh air and provide oxygen if breathing is difficult. Obtain medical attention if symptoms occur.

Skin Contact First Aid: Wash thoroughly with soap and water.

Material Safety Data Sheet

Eye Contact First Aid: Immediately irrigate eyes with flowing water continuously for 15 minutes while holding eyes open. Contacts should be removed before or during flushing. If irritation persists, contact a physician.

Ingestion First Aid: Ingestion is not a likely route of exposure.

Medical Conditions Aggravated: Chronic bronchitis, emphysema and other lung diseases can be aggravated by exposure to nuisance dust.

Note to Physician: Treat patient symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point/Method: Nonflammable

Auto Ignition Temperature: not applicable

Upper/Lower Explosion Limits: not applicable

Extinguishing Media: Use extinguishing media appropriate for the surrounding fire.

Fire Fighting Procedures: Firefighters should be protected from nuisance dust.

Fire & Explosion Hazards: none known

Hazardous Products of Decomposition and/or Combustion: none known

NFPA Ratings:

HEALTH- 1 FLAMMABILITY- 0 REACTIVITY- 0 OTHER- none

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill/Leak Procedures: Sweep up for disposal and clean area to control unnecessary dust.

Cleanup: Prevent generation of dust during cleanup.

Regulatory Requirements: Use only for blast media and use methods of respirable dust control for keeping airborne dust within OSHA exposure limits. **DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER.** All disposal methods must be in compliance with all Federal, State, Local and Provincial laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

SECTION 7 – HANDLING AND STORAGE

Handling: Avoid dispersion into air. Follow good handling and housekeeping practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces. Use with adequate exhaust ventilation to draw dust away from workers' breathing zones. Prevent or minimize exposures to dusts by using appropriate respirators, gloves, and eye protection. Wash exposed skin areas thoroughly with soap and water.

Storage: Store in ambient atmospheric conditions. Product should be stored in a closed dry container. Maintain good housekeeping procedures.

Material Safety Data Sheet

General Comments: Empty containers may contain product residues (dust, solids); observe all warnings and precautions listed for the product.

SECTION 8 –PERSONAL PROTECTION/ EXPOSURE CONTROL

Respiratory Protection: Use NIOSH /MSHA approved air supply hoods and filters for operators.

Skin Protection: Wear leather or equivalent gloves.

Eye Protection: Wear safety glasses or goggles. Where eye contact or dusty conditions may be likely, dust tight goggles are recommended.

Ventilation Protection: Use general or local exhaust to meet dust TLV requirement.

Other Protection: Safety showers, with quick opening valves which stay open, and eye wash fountains, or other means of washing the eyes with a gentle flow of cool to tepid tap water, should be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

Exposure Limits:

Exposure limits have not been developed for Garnet Sand. However, the following limits are recommended:

<u>MATERIAL</u>	<u>OSHA PEL, mg/m3</u>	<u>ACGIH TLV, mg/m3</u>
Particulates, Not Otherwise Regulated	15 (total) 5 (resp)	--- ---
Particulates, Not Otherwise Classified	--- ---	10 (inhalable) 3 (resp)
Quartz	10 / % Silica + 2 (resp)	0.1 (resp)"

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Pink to purple colored particles, no odor

Vapor Pressure: N/A*

Vapor Density (Air=1): N/A

Boiling Point: N/D**

Melting Point: N/D

Specific Gravity: 3.8 -4.2

Solubility in Water: Insoluble

Volatile Percentage: N/A

pH: N/A

Flash Point/method: Nonflammable

Auto Ignition Temperature: N/A

Material Safety Data Sheet

Upper/Lower Explosion Limits: N/A **Other:** N/A

*N/A=Not applicable

**N/D=Not determined

SECTION 10 – STABILITY AND REACTIVITY

Stability: This product is considered stable under the specified conditions of storage, shipment and use.

Incompatibilities: None known.

Polymerization: Hazardous polymerization will not occur.

Decomposition: None known.

Conditions to avoid: None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

Inhalation – Acute: Inhalation of nuisance dust may cause throat or lung irritation, coughing, and/or shortness of breath.

Inhalation – Chronic: Overexposure to dust containing particles of quartz may cause silicosis. Long term inhalation may cause lung injury.

Skin Contact – Acute: Skin contact may cause mechanical irritation.

Skin Contact – Chronic: There are no known chronic dermal effects.

Eye Contact – Acute: Eye contact with nuisance dust will cause irritation.

Ingestion – Acute: Ingestion is not a likely route of exposure.

Ingestion – Chronic: There are no known chronic ingestion effects.

Carcinogenicity/Mutagenicity: Quartz, a trace component of this material, is considered a “Suspected Human Carcinogen” by ACGIH.

Reproductive Effects: There are no known reproductive effects.

Neurotoxicity: There are no known neurotoxic effects.

Other Effects: There are no other known toxic effects.

Target Organs: Target organs include the respiratory system and the eyes.

SECTION 12 – ECOLOGICAL INFORMATION

This material, in its original state, is not harmful to the environment.

Material Safety Data Sheet

SECTION 13 – DISPOSAL CONSIDERATIONS

Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. Generators of waste material are required to evaluate all waste for compliance with RCRA and any local disposal procedures and regulations. NOTE: State and local regulations may be more stringent than federal regulations.

SECTION 14 – TRANSPORTATION INFORMATION

DOT Shipping Description: This product is not regulated by DOT.

SECTION 15 – REGULATORY INFORMATION

CERCLA SECTION 103 (40CFR302.4): no RQ: none
SARA SECTION 302 (40CFR355.30): no
SARA SECTION 304 (40CFR355.40): no
SARA SECTION 313 (40CFR372.65): no
OSHA PROCESS SAFETY (29CFR1910.119): no
CALIFORNIA PROPOSITION 65: no

SECTION 16 – OTHER INFORMATION

Disclaimer: The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the user thereof. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial and local laws.

Revision Indicator: April 2011, Revised Section 1 (Updated manufacturer's name)