

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Silica Sand Product Number:

Synonyms: Silicon Dioxide, Silica Sand,

CAS Number: Not applicable to blends.

Company Identification: Northern Filter Media
2509 Pettibone Ave., Muscatine, IA 52761
(563) 263-2711 (For product information)
1-202-483-7616 (For emergencies - Chemtrec)

Web: www.northernfiltermedia.com
www.zeobest.com

2. COMPOSITION / INFORMATION ON INGREDIENTS:

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Silicon Dioxide, SiO ₂	>93%	14808-60-7	0.1 mg/m ³	0.1 mg/m ³ (respirable dust)
Particulates Not Otherwise Classified or Regulated			15 mg/m ³ respirable	

COMPOSITION COMMENT: Silica, Crystalline Quartz (respirable).

California Prop 65: This product does contain an ingredient which is known to the state of California to cause cancer, birth defects, or other reproductive harm. SiO₂, Silicon Dioxide from long term inhalation. See Section 15.

HAZARDS DISCLOSURE: This product contains known hazardous materials in reportable levels as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 except as listed above. As defined under Sara 311 and 312, this product contains known hazardous materials.

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW****Excessive inhalation of crystalline silica is a serious health concern.**

HMIS/NFPA Rating:

Health - 1, Flammability - 0, Reactivity - 0, Personal Protection Index - t

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: t = Dust respirator under dust generating conditions.

POTENTIAL HEALTH EFFECTS

INHALATION:

Acute, short term exposure; mild and temporary discomfort to respiratory tract. Similar to nuisance dust. Excessive inhalation of crystalline silica is a serious health concern.

INGESTION: Not Listed.

SKIN CONTACT: No hazard known or expected.

EYE CONTACT: Dust may cause mechanical irritation, redness, pain, and corneal damage if not flushed out promptly.

CHRONIC EXPOSURE: Chronic, long term exposure (10 years - 30 years), may result in pulmonary fibrosis (silicosis). Aggravates bronchitis, asthma and emphysema.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Bronchitis, Emphysema and Asthma. Smoking is known to aggravate the effects of exposure. Persons with silicosis may develop tuberculosis. Exposure to crystalline silica may also result in scleroderma and/or kidney disease.

4. FIRST AID MEASURES

INHALATION FIRST AID:

If a respiratory problem develops from dust. Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility. Normally all that is required will be to bring victim to fresh clean air.

SKIN CONTACT FIRST AID: Not Required.

EYE CONTACT FIRST AID:

If dust comes into contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

INGESTION FIRST AID: First aid procedures not normally required.

STATEMENT OF PRACTICAL TREATMENT: Always have plenty of water available for first aid. Get medical attention if any symptoms develop or persist.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Not flammable.

FLAMMABLE LIMITS IN AIR, % by Volume:

Not applicable

AUTO IGNITION TEMPERATURE:

Not available

EXTINGUISHING MEDIA: Water, dry chemical, alcohol foam, or carbon dioxide. Material floats on water. Water spray may be used to keep exposed material cool. Do not allow water runoff to enter sewers or waterways.

FIRE & EXPLOSION HAZARDS: NONE

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Physical form requires no obvious personal protective equipment when cleaning up spills. Wear a dust mask if particulate count exceeds limits.

SPILLS PROCEDURE: Material may be wetted with water to reduce dust and collected for reprocessing or disposal.

ENVIRONMENTAL PRECAUTIONS: None.

7. HANDLING AND STORAGE

RECOMMENDED STORAGE CONDITIONS: Avoid conditions of extreme humidity.

SHELF LIFE: Indefinite if stored properly.

HANDLING (PERSONNEL): Handle in accordance with good hygiene and safety procedures. Avoid breathing dust if present. Wash thoroughly after handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS: See Section 2 above.

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED): If the respirable particulate exposure limit is exceeded, wear a NIOSH approved dust mask.

SKIN PROTECTION: In normal industrial use no skin protection is required.

EYE PROTECTION: When mechanically working this product, safety glasses with side shields or coverall goggles are recommended for airborne dust exposures in excess of the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: solid sheet

ODOR: odorless

SOLUBILITY IN WATER: Insoluble in water

MELTING/FREEZING POINT: Not available

Auto ignition Temperature: Not available

Flash Point & Method: Not applicable – non-flammable

VOC = None

COLOR: Tan to off white granuals

BOILING POINT: 2230 C (4046 F)

SPECIFIC GRAVITY: 2.6 g/cm³

Evaporation Rate: Not applicable

pH: Not applicable

VAPOR PRESSURE: @ 72 F 10 mm Hg

10. STABILITY AND REACTIVITY

STABILITY: The material is stable.

CONDITIONS TO AVOID: Contact with incompatibles, see below.

POLYMERIZATION: Polymerization will not occur.

INCOMPATIBILITY: Contact with agents such as molten magnesium, fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, or hydrofluoric acid may cause fires or corrosive gases.

DECOMPOSITION PRODUCTS: None.

11. TOXICOLOGICAL INFORMATION

Toxicity: There are no toxicological data for this material.

Adverse health effects are not known nor are expected under normal use.

Local effects: Dust may cause mechanical irritation of eyes. Chronic, long term exposure (10 years - 30 years), may result in pulmonary fibrosis (silicosis). Aggravates bronchitis, asthma & emphysema.

Sensitization: Not known to occur with this material.

Long term toxicity: Adverse health effects are not known nor are expected under normal use.

12. ECOLOGICAL INFORMATION

Material offers no known environmental hazard.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Whatever cannot be saved for recovery or recycling should be handled as a non hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of material in accordance with federal, state and local requirements. May be land filled according to local, state and federal regulations.

CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.

14. TRANSPORTATION INFORMATION**Domestic (Land, D.O.T.), International (Water, I.M.O.), International (Air, I.C.A.O.)**PRODUCT LABEL: **Silica Sand**

UN NUMBER: Non-Regulated material

PACKAGE CLASS: 50

D.O.T. HAZARD CLASS: NA

D.O.T. PROPER SHIPPING NAME: Not regulated

PACKING GROUP: NA

PRODUCT RQ (LBS): None

15. REGULATORY INFORMATION - FEDERAL REGULATORY STATUS

OSHA Classification: Product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200. As a respirable dust only.

This product is also regulated by the Mine Safety Health Administration (MSHA).

Carcinogenicity: by IARC?: Yes (X) No () by NTP?: Yes (X) No ()

IARC classifies crystalline silica in Group 2A, "probably carcinogenic to humans."

NTP classifies respirable crystalline silica in a category of substances which may "reasonably be anticipated to be carcinogens."

California Prop 65: Yes (X) No ()

Silica, crystalline (airborne particles of respirable size), is cited in 90 California Reg. Notice 984, Safe Drinking Water and Enforcement Act of 1986, as known to the state of California to cause cancer.

Not on the 302 list of SARA reportable quantities.

Poison Schedule: None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA). This material or all of its components are listed on the Canadian Domestic Substances List (DSL). This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS). Other inventory lists: ENCS (Japan), Korea, Australia, China (Draft), PICCS (Philippines), Japan (ENCS).

16. OTHER INFORMATION

Prepared By.....: Donato Polignone

Part Number.....:

Approved By.....: Donato Polignone

Title.....: MSDS Coordinator

Approval Date.....: January 18, 2005

Supersedes Date...: January 10, 2005

ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998)

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Northern Gravel Company. The data on this sheet are related only to the specific material designated herein. Northern Gravel Company assumes no legal responsibility for use or reliance upon these data.

END OF MSDS