

MATERIAL SAFETY DATA SHEET

ENVIROFILL

Last Updated February 5, 2010



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Envirofill**

Product Use: Infill for synthetic / artificial turf

Company Identification: **USGreentech, LLC**
3607 Church Street
Cincinnati, OH 45244
(800) 548-0402 For Product Information
(800) 548-0402 For Emergencies

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 (TWA)</u>	<u>ACGIH TWA</u>
Silicon Dioxide	>98%	14808-60-7	100 ppm	50 ppm
Acrylic Polymers	<2%	Proprietary		
Calcium Carbonate	<0.2%	471-34-1		

COMPOSITION NOTE: This product consists of silicon Dioxide coated with an acrylic polymer. Although Envirofill® is composed primarily of Silica Sand (SiO₂), and such sand is potentially a source of respirable dust, the sand particles in Envirofill ® are thoroughly encapsulated in a coating which captures all dust and should, under normal circumstances, prevent any normal release of silica dust to the workplace.

CALIFORNIA PROP 65: This product does contain an ingredient(s), above the safe harbor limits, which are known to the state of California to cause cancer.

HAZARDS DISCLOSURE: This product does contain 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

This product may cause mechanical irritation to eyes, skin or respiratory system. Long term exposure to respirable concentrations of respirable crystalline silica above permissible exposure levels may have the potential to cause silicosis and/or lung cancer.

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POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Eyes, Inhalation, Ingestion.

INHALATION: Inhalation of dust may irritate the upper respiratory system

INGESTION: Ingestion of this product may cause gastrointestinal irritation.

SKIN CONTACT: Contact with skin not expected to cause irritation.

EYE CONTACT: Contact with eyes will cause mechanical irritation.

CHRONIC EXPOSURE: Long term exposure to concentrations of respirable crystalline silica over the permissible exposure levels may have the potential to cause silicosis and/or lung cancer.

4. FIRST AID MEASURES

INHALATION FIRST AID: This product is not expected to generate dust under normal conditions. If dusts generated by this product are inhaled, remove contaminated individual to fresh air. If individual stops breathing, use artificial respiration to support vital functions. Seek medical attention.

SKIN CONTACT FIRST AID This product may produce a mechanical irritation. It is not expected to require medical attention.

EYE CONTACT FIRST AID: If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes lifting upper and lower eyelids occasionally. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

INGESTION FIRST AID: Routine use of this product is not expected to cause any situation which could lead to ingestion.

NOTE TO PHYSICIANS: Treat symptoms

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Non-Flammable

AUTO IGNITION TEMPERATURE: Not Applicable

FLASH POINT: NA.

FLAMMABLE LIMITS IN AIR, % by Volume: lel: NA; uel: NA

EXTINGUISHING MEDIA: Use fire extinguishing materials appropriate for surrounding fire.

FIRE & EXPLOSION HAZARDS: None

6. ACCIDENTAL RELEASE MEASURES

SPILL CLEAN-UP PROCEDURES: Vacuum or sweep up material and place all spilled residue in a suitable container. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations.

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7. HANDLING AND STORAGE

STORAGE CONDITIONS: Store containers in a cool, dry location, and away from direct sunlight.

HANDLING: Avoid breakage of bagged material or spills of bulk material. Material does not have a shelf life. Stack bagged material so that it does not have the opportunity to fall. This material is not hazardous under normal storage conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS: See Section 2 above.

Silicon Dioxide:

-OSHA Permissible Exposure Limit (PEL): 10 mg/m³/%SiO₂+2

-ACGIH Threshold Limit Value (TWA): 0.025 mg/m³

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended.

PERSONAL RESPIRATORS (NIOSH APPROVED): If the exposure limit is exceeded and engineering controls are not feasible, wear a N95 Dust Mask.

RESPIRATORY PROTECTION: Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

SKIN PROTECTION: Not required in normal applications.

EYE PROTECTION: Use safety glasses to prevent contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Odorless

SOLUBILITY IN WATER: Negligible

MELTING POINT: 1710°C

AUTO IGNITION TEMPERATURE: NA

pH: NA

BOILING POINT: 2230°C

SPECIFIC GRAVITY: 2.9 – 3.1

EVAPORATION RATE (BuAc=1): NA

FLASH POINT: NA

BULK DENSITY: ~110 lbs/ft³

10. STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID: Extreme temperatures above 870°C

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBILITY WITH OTHER MATERIALS: None

HAZARDOUS DECOMPOSITION: None

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11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA:

The international Agency for Research on Cancer (IARC) has reported there is "limited" evidence that crystalline silica may cause cancer in humans who have silicosis. They have classified it as a Group 2A Potential Carcinogen. Although Envirofill® is composed primarily of Silica Sand (SiO₂), and such sand is potentially a source of respirable dust, the sand particles in Envirofill ® are thoroughly encapsulated in a coating which captures all dust and should, under normal circumstances, prevent any normal release of silica dust to the workplace.

SUSPECTED CANCER AGENT: A component of this product is found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are considered to be, or suspected to be a cancer-causing agent by these agencies. Silicon Dioxide (Sand) CAS#14808-60-7

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

No Data

ENVIRONMENTAL TOXICITY:

There is no data that suggests that this product is toxic to birds, fish, invertebrates, microorganisms or plants.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Recover, reclaim or recycle when practical.

Dispose of material in accordance with federal, state and local requirements.

14. TRANSPORTATION INFORMATION

**DOMESTIC (LAND, D.O.T.), INTERNATIONAL (WATER, I.M.O.), INTERNATIONAL (AIR, I.C.A.O.)
NON-REGULATED MATERIAL**

15. REGULATORY INFORMATION

FEDERAL REGULATORY STATUS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, and are listed as follows:

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

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U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.

STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): A component of this product is on the Proposition 65 Lists. Silicon Dioxide CAS#14808-60-7.

16. OTHER INFORMATION

Prepared By: Paul Eigbrett (MSDS Authoring Services)

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 Z400.1-2004)

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END OF MSDS