Material Safety Data Sheet
Infusorial Earth

ACC# 11335

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Infusorial Earth  
**Catalog Numbers:** C211-500, C212-25LB, C212-500, C212-50LB, I22-3, NC9073348, XXC2122.5KG  
**Synonyms:** Diatomaceous earth; Diatomaceous silica; Siliceous earth; Kieselguhr is a soft siliceous solid composed of skeletons of small prehistoric aquatic plants. Contains primarily silica.  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
For information, call: 201-796-7100  
Emergency Number: 201-796-7100  
For CHEMTREC assistance, call: 800-424-9300  
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>61790-53-2</td>
<td>Kieselguhr</td>
<td>&gt; 99</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: slightly gray solid.  
**Warning!** Dust may cause mechanical eye irritation. Causes respiratory tract irritation. May cause skin irritation. Contains trace amounts of quartz which may lead to fibrotic lung disease, silicosis or cancer.  
**Target Organs:** Lungs.

**Potential Health Effects**  
**Eye:** Dust may cause mechanical irritation.  
**Skin:** May cause skin irritation.  
**Ingestion:** May cause irritation of the digestive tract.  
**Inhalation:** Contains crystalline silica which may lead to respiratory abnormalities and silicosis. Causes irritation of the mucous membrane and upper respiratory tract.  
**Chronic:** Chronic exposure may cause lung damage. May cause silicosis-disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, dry cough, shortness of breath, emphysema, decreased chest expansion and increased susceptibility to tuberculosis.

Section 4 - First Aid Measures

2/1/2005
**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively. Persons with pre-existing upper respiratory and lung disease may be at increased risk from exposure to this product.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use extinguishing media most appropriate for the surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an
eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kieselguhr</td>
<td>10 mg/m³ TWA (inhalable fraction, particulate matter containing no asbestos and &lt; 1% crystalline silica); 3 mg/m³ TWA (respirable fraction, particulate matter containing no asbestos and &lt; 1% crystalline silica)</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Kieselguhr: 6 mg/m³ TWA

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator’s use.

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### Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** slightly gray

**Odor:** odorless

**pH:** 9-10

**Vapor Pressure:** 10 mm Hg @ 1710

**Vapor Density:** Not available.

**Evaporation Rate:** Not applicable.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** insoluble

**Specific Gravity/Density:** Not available.

**Molecular Formula:** Not available.

**Molecular Weight:** Not available.

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### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, dust generation, excess heat.

**Incompatibilities with Other Materials:** Hydrogen fluoride, strong acids.

**Hazardous Decomposition Products:** Oxides of silicon.

**Hazardous Polymerization:** Will not occur.
Section 11 - Toxicological Information

RTECS#:  
CAS# 61790-53-2: VV7311000  
LD50/LC50:  
Not available.

Carcinogenicity:  
CAS# 61790-53-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Amorphous silica is a component of diatomaceous earth. Amorphous silica has been tested for carcinogenicity in many animal studies. Most of the tests were negative or inadequate. IARC has concluded that evidence is inadequate to describe amorphous silica as carcinogenic in animals or in humans. However, crystalline silica has been designated as a probable human carcinogen, IARC 2A.

Teratogenicity: No information available.
Reproductive Effects: No information available.
Neurotoxicity: No information available.
Mutagenicity: Please refer to RTECS# VV 7311000 for specific information.
Other Studies: None.

Section 12 - Ecological Information

Ecotoxicity: Fish: Carp: LC50 > 10000 mg/L; 72 Hr; Unspecified

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name</td>
<td>Not regulated as a hazardous material</td>
<td>No information available.</td>
</tr>
<tr>
<td>Hazard Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group</td>
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</tbody>
</table>

Section 15 - Regulatory Information
US FEDERAL

TSCA
CAS# 61790-53-2 is listed on the TSCA inventory.

Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 61790-53-2 can be found on the following state right to know lists: Minnesota.

California Prop 65
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
Not available.

Risk Phrases:

Safety Phrases:
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 61790-53-2: No information available.

Canada - DSL/NDSL
CAS# 61790-53-2 is listed on Canada’s NDSL List.

Canada - WHMIS
This product has a WHMIS classification of D2B.

Canadian Ingredient Disclosure List
MSDS Creation Date: 6/03/1999
Revision #4 Date: 12/03/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.