1 Identification

- **Product identifier**
  - Trade name: ZeoFiber Cellulose Fiber
  - Other product identifiers: Powdered Cellulose
  - CAS Number: 9004-34-6

- **Recommended use and restriction on use**
  - **Recommended use**: Diatomaceous earth replacement filter media for water.
  - **Restrictions on use**: No relevant information available.

- **Details of the supplier of the Safety Data Sheet**
  - **Manufacturer/Supplier**: ZEO, Inc.
    2104 Augusta Street
    McKinney, TX 75070
    Phone: +1-972-542-0053
    Fax: +1-972-542-0211
  - **Emergency telephone number**: +1-972-542-0053

2 Hazard(s) identification

- **Classification of the substance or mixture**
  Combustible Dust  May form combustible dust concentrations in air.

- **Label elements**
  - **GHS label elements**
    The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**: Not regulated.
  - **Signal word**: Warning
  - **Hazard statements**: May form combustible dust concentrations in air.
  - **Additional information**: Read the label and safety data sheet before use. Prevent dust accumulations to minimize explosion hazard. Keep away from all ignition sources including heat, sparks and flame.

- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization**: Substances
  - **CAS No. Description**: 9004-34-6 cellulose

4 First-aid measures

- **Description of first aid measures**
  - **After inhalation**: Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing.
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(Cont'd. of page 1)

5 Fire-fighting measures

• Extinguishing media
  • Suitable extinguishing agents:
    Carbon dioxide
    Fire-extinguishing powder
    Foam
    Gaseous extinguishing agents
    Water fog / haze
  • For safety reasons unsuitable extinguishing agents: None.
• Special hazards arising from the substance or mixture
  Can pose a dust explosion hazard if dispersed in air. Avoid ignition sources.
  In case of fire, the following can be released:
    Carbon monoxide, carbon dioxide.
• Advice for firefighters
• Protective equipment:
  Wear self-contained respiratory protective device.
  Wear fully protective suit.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures
  Ensure adequate ventilation.
  Avoid formation of dust.
  Do not breathe dust.
  If airborne dust and/or fume is present, use adequate engineering controls and, if needed, personal protection to prevent overexposure. Refer to recommendations in Section 8.
• Environmental precautions No special measures required.
• Methods and material for containment and cleaning up
  Vacuum or sweep and collect in a suitable container. For a large spill, collect uncontaminated product for possible re-use. Avoid creating dusty conditions.
  Send for recovery or disposal in suitable receptacles.
• Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

(Cont'd. on page 3)
7 Handling and storage

- Handling
  - Precautions for safe handling:
    Ensure good ventilation/exhaustion at the workplace.
    Use personal protective equipment as required.
    Take off contaminated clothing and wash it before reuse.
    Wash hands before breaks and at the end of work.
    Prevent formation of dust.
    Avoid breathing dust.
  - Information about protection against explosions and fires:
    May form combustible dust concentrations in air.
    Avoid dust cloud formation. Keep ignition sources away. No smoking.

- Conditions for safe storage, including any incompatibilities
  - Storage
    - Requirements to be met by storerooms and receptacles:
      Storage area should be dry and well-ventilated.
    - Information about storage in one common storage facility: Store away from oxidizing agents.
    - Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- Control parameters

  Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9004-34-6 cellulose</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 15* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 10* 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust, **respirable fraction</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
</tbody>
</table>

- Exposure controls
  - Engineering measures Provide adequate ventilation.
  - Personal protective equipment:
  - General protective and hygienic measures:
    Wash hands before breaks and at the end of work.
    Avoid breathing dust.
    Avoid contact with the eyes.
  - Engineering controls: Provide adequate ventilation.
  - Breathing equipment: NIOSH or EU approved dust respirator is highly recommended when ventilation is poor.

(Cont'd. on page 4)
Particulate mask should filter at least 99% of airborne particles.

- **Protection of hands:**
  - Gloves are advised for repeated or prolonged contact.
  - Protection may be required for spills.
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:**
  - Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:**
  - Not required under normal conditions of use.
  - Protection may be required for spills.

**Limitation and supervision of exposure into the environment**

No relevant information available.

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### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **Appearance:**
    - Form: Powder
    - Color: White
    - Odor: Odorless
    - Odor threshold: Not determined.
  - **pH-value:** 5.0-7.5
  - **Melting point/Melting range:** Not determined.
  - **Boiling point/Boiling range:** Not determined.
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** May form combustible dust concentrations in air.
  - **Auto-ignition temperature:** ~500 °C (~932 °F)
  - **Decomposition temperature:** ~200 °C (~392 °F)
  - **Danger of explosion:** Can pose a dust explosion hazard if dispersed in air.
  - **Explosion limits**
    - Lower: Not determined.
    - Upper: Not determined.
  - **Oxidizing properties:** Non-oxidizing.
  - **Vapor pressure:** Not applicable.
  - **Density:**
    - Relative density: 1.21-1.61 g/cm³ (10.1-13.44 lbs/gal)
    - Vapor density: Not applicable.
    - Evaporation rate: Not applicable.

- **Solubility in / Miscibility with**
10 Stability and reactivity

- **Reactivity**: No relevant information available.
- **Chemical stability**: Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided**: No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**: May form combustible dust concentrations in air.
- **Conditions to avoid**: Prevent formation of dust.
- **Incompatible materials**: No relevant information available.
- **Hazardous decomposition products**: Under fire conditions only; carbon monoxide and carbon dioxide.

11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**: Based on available data, the classification criteria are not met.
  - **LD/LC50 values that are relevant for classification**: None.
  - **Primary irritant effect**
    - **On the skin**: Based on available data, the classification criteria are not met.
    - **On the eye**: Based on available data, the classification criteria are not met.
  - **Sensitization**: Based on available data, the classification criteria are not met.
- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**: Substance is not listed.
  - **NTP (National Toxicology Program)**: Substance is not listed.
  - **OSHA-Ca (Occupational Safety & Health Administration)**: Substance is not listed.
- **Probable route(s) of exposure**
  - Ingestion.
  - Inhalation.
  - Eye contact.
  - Skin contact.
- **Repeated dose toxicity**: Long term inhalation of product dust may be harmful.
- **Germ cell mutagenicity**: Based on available data, the classification criteria are not met.
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- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
- Aquatic toxicity Generally not hazardous for water
- Persistence and degradability No relevant information available.
- Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- Other adverse effects No relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation:
  Smaller quantities can be disposed of with household waste.
  The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, ADR, IMDG, IATA Not regulated.
- UN proper shipping name
  - DOT, ADR, IMDG, IATA Not regulated.
- Transport hazard class(es)
  - DOT, ADR, IMDG, IATA Class Not regulated.
- Packing group
  - DOT, ADR, IMDG, IATA Not regulated.
- Environmental hazards
  - Marine pollutant: No
- Special precautions for user Not applicable.
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
  - SARA
    - Section 302 (extremely hazardous substances):
      Substance is not listed.
    - Section 355 (extremely hazardous substances):
      Substance is not listed.
    - Section 313 (Specific toxic chemical listings):
      Substance is not listed.
- TSCA (Toxic Substances Control Act)
  Substance is listed.
- Proposition 65 (California)
  - Chemicals known to cause cancer:
    Substance is not listed.
  - Chemicals known to cause reproductive toxicity for females:
    Substance is not listed.
  - Chemicals known to cause reproductive toxicity for males:
    Substance is not listed.
  - Chemicals known to cause developmental toxicity:
    Substance is not listed.
- EPA (Environmental Protection Agency):
  Substance is not listed.
- IARC (International Agency for Research on Cancer):
  Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health):
  Substance is not listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Date of preparation / last revision December 04, 2017 / -
- Abbreviations and acronyms:
  ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
### Trade name: ZeoFiber Cellulose Fiber

IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
NIOSH: National Institute for Occupational Safety and Health  
OSHA: Occupational Safety & Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit

### Sources

Website, European Chemicals Agency (echa.europa.eu)  
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)  
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)  
Safety Data Sheets, Individual Manufacturers  
SDS Prepared by:  
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