1. Identification

1.1. Product identifier
Product Identity MagmaFiber
Alternate Names Mineral Wool

1.2. Relevant identified uses of the substance or mixture and application method
Intended use Lost Circulation
Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet
Company Name NorthStar Fluid Solutions
P.O. Box 271036
Louisville, Colorado 80027, USA

Emergency
CHEMTREC (USA) (800) 424-9300
24 hour Emergency Telephone No. International +1-703-527-3887
Customer Service: NorthStar Fluid Solutions (303) 495-3130

2. Hazard(s) identification

2.1. Classification of the substance or mixture
Not Classified

2.2. Label elements
Not Classified. Contains no hazardous substances.

[Prevention]: Not classified.
[Response]: Not classified.
[Storage]: Not classified.
[Disposal]: Not classified.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS Number</th>
<th>PERCENT (w/w)</th>
<th>GHS Classification - US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Wool</td>
<td>65997-17-3</td>
<td>60 - 100%</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.
[1] Substance classified with a health or environmental hazard.
*The full texts of the phrases are shown in Section 16.
4. First aid measures

4.1. Description of first aid measures

Inhalation  If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes  In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin  Wash with soap and water. Get medical attention if irritation persists.

Ingestion  Under normal conditions, first aid procedures are not required.

4.2. Most important symptoms and effects, both acute and delayed

No significant hazards expected. May cause mild eye, skin, and respiratory irritation.

5. Fire-fighting measures

5.1. Extinguishing media
All standard fire fighting media.

5.2. Special hazards arising from the substance or mixture
Special Exposure hazards
Not applicable.

5.3. Advice for fire-fighters
Full protective clothing and approved self contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use appropriate protective equipment. Avoid contact with skin, eyes and clothing. Avoid creating and breathing dust. Ensure adequate ventilation. See section 8 for additional information.

6.2. Environmental precautions
Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up
Scoop up and remove.
7. Handling and storage

7.1. Precautions for safe handling
Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Use appropriate protective equipment.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities
Store in dry location.

7.3. Specific end use(s)
Exposure Scenario No information available.
Other Guidelines No information available.

8. Exposure controls and personal protection

8.1. Control parameters
Exposure

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS Number</th>
<th>OSHA PEL-TWA</th>
<th>ACGIH TLV-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains no hazardous substances</td>
<td>NA</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Personal Protective Equipment
If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Not normally needed. But if significant exposures are possible then the following respirator is recommended: Dust/mist respirator. (N95, P2/P3)

Eyes Wear safety glasses or goggles to protect against exposure.

Skin Normal work gloves and coveralls.

Engineering Controls Use in a well ventilated area.

Other Work Practices Not known.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Fibers. White to gray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Melting point / freezing point: No data available
Initial boiling point and boiling range: No data available
Flash Point: No data available
Evaporation rate (Ether = 1): No data available
Flammability (solid, gas): No data available
Upper/lower flammability or explosive limits: No data available
Vapor pressure (Pa): No data available
Vapor Density: No data available
Specific Gravity: 2.6
Solubility in Water: Insoluble in water
Partition coefficient n-octanol/water (Log Kow): No data available
Auto-ignition temperature: No data available
 Decomposition temperature: No data available
Viscosity (cSt): No data available
Density (lbs/gal): No data available

9.2. Other information
VOC Content (%): No data available
Bulk Density: 12-26 lbs/ft3

10. Stability and reactivity

10.1. Reactivity
Not applicable
10.2. Chemical stability
Stable
10.3. Possibility of hazardous reactions
Will not occur
10.4. Conditions to avoid
None anticipated
10.5. Incompatible materials
Strong acids
10.6. Hazardous decomposition products
Carbon monoxide and carbon dioxide

11. Toxicological information

11.1 Information on toxicological effects
Acute oral toxicity: No data available
Acute dermal toxicity: No data available
Acute inhalation toxicity: No data available

Skin corrosion/irritation: May cause mechanical irritation to skin.

Serious eye damage/eye irritation: May cause mechanical irritation to eye.

Respiratory/skin sensitization: No data available to indicate product or components present at greater than 1% are chronic health hazards.

Mutagenicity: No data available to indicate product or components present at greater than 1% are chronic health hazards.

Carcinogenicity: No data available to indicate product or components present at greater than 1% are chronic health hazards.

Reproductive toxicity: No data available to indicate product or components present at greater than 1% are chronic health hazards.

STOT - single exposure: No known effects.

STOT - repeated exposure: No known effects.

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS Number</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains no hazardous substances</td>
<td>NA</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity
Ecotoxicity Effects

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS Number</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Toxicity to Invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains no hazardous substances</td>
<td>NA</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS Number</th>
<th>Persistence and Degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains no hazardous substances</td>
<td>NA</td>
<td>No information available</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS Number</th>
<th>Log Pow</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains no hazardous substances</td>
<td>NA</td>
<td></td>
<td>No information available</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
No information available

12.5. Results of PBT and vPvB assessment
No information available
12.6. Other adverse effects
No information available

13. Disposal considerations

13.1. Waste treatment methods
Disposal Method
Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging
Follow all applicable national or local regulations.

14. Transport information

14.1. UN number
Not restricted

14.2. UN proper shipping name
Not restricted

14.3. Transport hazard class(es)
DOT Hazard Class: Not applicable
IMDG: Not applicable
Sub Class: Not applicable
Air Class: Not applicable

14.4. Packing group
Not applicable

14.5. Environmental hazards
IMDG
Not applicable

14.6. Special precautions for user
None

15. Regulatory information

US TSCA Inventory
All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances
Not applicable

EPA SARA (311,312) Hazard Class
None

EPA SARA (313) Chemicals
This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity
Not applicable
EPA RCRA Hazardous Waste Classification
If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65
All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law
Does not apply.

NJ Right-to-Know Law
Does not apply.

PA Right-to-Know Law
Does not apply.

Canadian Regulations
All components listed on inventory or are exempt.

16. Other information

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable Federal, State and local law and regulations. NorthStar Fluid Solutions makes no warranty of any kind, express or implied, concerning the accuracy of completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. NorthStar Fluid Solutions will not be liable for claims relating to any use of this product.

Emergency Overview:
Risk Classification System:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
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<tr>
<td>FLAMMABILITY</td>
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<tr>
<td>PHYSICAL</td>
<td>0</td>
</tr>
<tr>
<td>PPE</td>
<td>B</td>
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