SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : Q-Fiber® Bulk, Q-Fiber® Felt

Manufacturer or supplier's details
Company : Johns Manville
Address : P.O. Box 5108
          Denver, CO USA 80127
Telephone : +1 303-978-2000 8:00 a.m.-5:00 p.m. M-F
Emergency telephone number : 1-800-424-9300 (Chemtrec, in English)
Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Carcinogenicity : Category 2

GHS label elements
Hazard pictograms : 

Signal word : Warning
Hazard statements : H351 Suspected of causing cancer if inhaled.
Precautionary statements : 
  Prevention:
  P201 Obtain special instructions before use.
  P202 Do not handle until all safety precautions have been read
  and understood.
  P281 Use personal protective equipment as required.
  Response:
  P308 + P313 IF exposed or concerned: Get medical advice/
  attention.
  Storage:
  P405 Store locked up.
  Disposal:
  P501 Dispose of contents/ container to an approved waste
  disposal plant.

Other hazards
Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon
exposure to fibers or dust during handling of this product and cannot occur unless there is direct
contact.
Abrasions effects should subside after cessation of exposure.
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Pure non-crystalline (amorphous) silica fiber (99.9+% SiO2) Felt formed from 98.5+% pure amorphous silica fibers using a water deposition process.

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure amorphous silica microfiber</td>
<td>Not Assigned</td>
<td>&gt; 98.5 - &lt;= 100</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Get medical attention if symptoms occur.

If inhaled : Move to fresh air.
            If symptoms persist, call a physician.

In case of skin contact : Take off all contaminated clothing immediately.
                         If on skin, rinse well with water.
                         Get medical attention if irritation develops and persists.

In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
                         If eye irritation persists, consult a specialist.

If swallowed : If symptoms persist, call a physician.
               Rinse mouth with water to remove dust or fibers and drink plenty of water to help reduce irritation.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Avoid dust formation.

Methods and materials for containment and cleaning up : Take up mechanically.
                                                      Pick up and arrange disposal without creating dust.
SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion: Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Conditions for safe storage: Keep in a dry, cool place.

Materials to avoid: No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure amorphous silica microfiber</td>
<td>Not Assigned</td>
<td>TWA</td>
<td>1 fiber/cm³</td>
<td>Recommended:</td>
</tr>
<tr>
<td>nuisance dust</td>
<td>Not Assigned</td>
<td>TWA (Total particulate)</td>
<td>15 mg/m³</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>5 mg/m³</td>
<td>OSHA</td>
</tr>
</tbody>
</table>

As a member of the North American Insulation Manufacturers Association (NAIMA), JM subscribes to the NAIMA Product Stewardship Program (NPSP). Under the NPSP, JM recommends that exposures be limited to the voluntary concentration of 1 f/cc TWA. The NPSP also includes work practice and respiratory protection recommendations. For more information, see NAIMA’s Health and Safety Reference Library (website: http://insulationinstitute.org/tools-resources/resource-library/health-safety/) to find the Product Stewardship Program Pocket Folder (N052) and other Fact Sheets.

Personal protective equipment

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Remarks: For prolonged or repeated contact use protective gloves.

Eye protection: Safety glasses

Skin and body protection: Long sleeved clothing

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**: loose, nonwoven
- **Colour**: white
- **Odour**: odourless
- **Odour Threshold**: No data available
- **pH**: Not applicable
- **Melting point/range**: Not applicable
- **Boiling point/boiling range**: Not applicable
- **Flash point**: Not applicable
- **Evaporation rate**: Not applicable
- **Flammability (solid, gas)**: No data available
- **Upper explosion limit**: Not applicable
- **Lower explosion limit**: Not applicable
- **Vapour pressure**: Not applicable
- **Relative vapour density**: Not applicable
- **Relative density**: No data available
- **Density**: Not applicable
- **Solubility(ies)**
  - **Water solubility**: Not applicable
- **Solubility in other solvents**: No data available
- **Partition coefficient: n-octanol/water**: No data available
- **Auto-ignition temperature**: No data available
- **Thermal decomposition**: Not applicable
- **Viscosity**
  - **Viscosity, dynamic**: Not applicable
  - **Viscosity, kinematic**: Not applicable

SECTION 10. STABILITY AND REACTIVITY

- **Reactivity**: No dangerous reaction known under conditions of normal use.
High Purity Silica Felt/Fiber

SECTION 11. TOXICOLOGICAL INFORMATION

Further information

Product:
Remarks: Pure silica fibers are of similar dimensions and durability (biopersistence) than glass microfibers (special purpose fibers). JM has adopted an internal GHS classification of a category 2 carcinogen, suspected of causing cancer. Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects

Product:
Additional ecological information: Due to the properties of the product, a hazard to the environment may not be expected.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Disposal of residual product: In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

International transport regulations
These products are not classified as dangerous goods according to international transport regulations.
SECTION 15. REGULATORY INFORMATION

TSCA list
TSCA - 5(a) Significant New Use Rule List of Chemicals: No substances are subject to a Significant New Use Rule.

U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D): No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: Chronic Health Hazard

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65
WARNING! This product contains a chemical known to the State of California to cause cancer. While amorphous silica is not on the Prop 65 list, JM believes these fibers could behave similarly to special purpose, biopersistent, glass wool fibers; therefore, we are providing a Prop 65 warning.

Glass wool fibers (inhalable and biopersistent) Not Assigned

The components of this product are reported in the following inventories:

TSCA: On TSCA Inventory
       : silica, vitreous

DSL: All components of this product are on the Canadian DSL
      : silica, vitreous

SECTION 16. OTHER INFORMATION

Further information
Revision Date: 06/20/2017

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to
the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.