Safety data sheet
According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS
Revision: 11.06.2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier
Fused Silica
GHS Product Identifier Fused Silica
Chemical Name Silicon Dioxide
Trade Name See Product Identifier
CAS No. 7631-86-9
EINECS No. 231-545-4
REACH Registration No. Not applicable

1.2 Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against
Application of the substance/the mixture Product component

1.3 Details Of The Supplier Of The Safety Data Sheet
Address 1801 Buffalo Avenue
Niagara Falls, NY 14302
Telephone (716) 278-6600
E-Mail (Competent Person) info@washingtonmills.com

1.4 Emergency Telephone Number – ChemTel
(800)255-3924 (USA/Canada), 813-248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification Of The Substance Or Mixture
2.1.1 Classification according to Regulation (EC) No. 1272/2008 (CLP)
The product is not classified as hazardous according to OSHA regulations within the United States.
The product does not have a classification according to the CLP regulation.

Hazard Pictogram(s) None

2.2 Label Elements
2.2.1 Label Elements According to Regulation (EC) No. 1272/2008 (CLP)
The product is not classified as hazardous according to OSHA regulations within the United States.
The product does not have a classification according to the CLP regulation.

Hazard Pictogram(s) Not Regulated Signal Word(s) Not Regulated

Hazard-determining components of labelling:
Hazard Not Regulated
Precautionary Statement(s) Not Regulated

NFPA ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0

HMIS Long Term Health Hazard Substances None

2.3 Other Hazards
PBT: Not applicable.
Results of PBT and vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
CAS No. Description
7631-86-9 silicon dioxide
Identification number(s)
EC number: 231-545-4

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures
General Information: No special measures required.
After Inhalation: Supply fresh air; consult doctor in case of complaints.
After Skin Contact: Brush off loose particles from skin. Wash with soap and water. If skin irritation is experienced, consult a doctor.
After Eye Contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After Swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

4.2 Most Important Symptoms And Effects, Both Acute And Delayed Hazards
Slight irritant effect on eyes.

4.3 Indication Of The Immediate Medical Attention And Special Treatment Needed
No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable Extinguishing Media
Use fire extinguishing methods suitable to surrounding conditions.
Unsuitable Extinguishing Media
None.

5.2 Special Hazards Arising From The Substance Or Mixture
No further relevant information available.

5.3 Advice for Fire-Fighters
Wear self-contained respiratory protective device. Wear fully protective suit.

Additional Information
No further relevant information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment And Emergency Procedures
Avoid formation of dust. Ensure adequate ventilation. Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away.

6.2 Environmental Precautions
Do not allow to enter sewers/ surface or ground water.

6.3 Methods And Material For Containment And Cleaning Up
Pick up mechanically. Dispose contaminated material as waste according to item 13.

6.4 Reference To Other Sections
See Section 7 for information on safe handling.
Fused Silica (See Page 1)

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions For Safe Handling

Prevent formation of dust. Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water. Any unavoidable deposit of dust must be regularly removed. Use only in well ventilated areas. No special measures required.

7.2 Conditions For Safe Storage, Including Any Incompatibilities:

Requirements to be Met by Storerooms and Receptacles:

Store away from oxidizing agents. Store away from foodstuffs. Do not store together with acids.

Information About Storage in One Common Storage Facility:

None.

7.3 Specific End Use(s)

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace: None

DNEls No further relevant information available.
PNECs No further relevant information available.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure Controls

Personal protective equipment:

General protective and hygienic measures:

8.2.2 Personal Protective Equipment:

General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Do not inhale dust / smoke / mist. Avoid contact with the eyes. Keep away from foodstuffs, beverages and feed.

Respiratory Protection Not required under normal conditions of use. For spills, respiratory protection may be advisable. Use suitable respiratory protective device when high concentrations are present.

Eye Protection Wear safety glasses.

Protection of Hands Wear protective gloves.

Body Protection Not required under normal conditions of use. Protection may be required for spills.

Risk Management Measures No special requirements.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Granulate</td>
</tr>
<tr>
<td>Odor</td>
<td>Odourless</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>No Data</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>Not available</td>
</tr>
<tr>
<td>Temperature (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>None</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility (Water)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition Coefficient (N-Octanol/Water)</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor threshold (ppm)</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point (°C) / Freezing</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive Limit Ranges</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Ph (Value)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>Not available</td>
</tr>
<tr>
<td>Density (g/ml)</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility (Other)</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity (mPa.s)</td>
<td>Not available</td>
</tr>
<tr>
<td>Not available</td>
<td></td>
</tr>
</tbody>
</table>

9.2 Other Information

No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
10.2 Chemical Stability

Thermal Decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.3 Possibility of Hazardous Reactions
Reacts with strong acids and alkali. Reacts with strong oxidising agents.

10.4 Conditions To Avoid
No further relevant information available.

10.5 Incompatible Materials
No further relevant information available.

10.6 Hazardous Decomposition Product(s)
No dangerous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

<table>
<thead>
<tr>
<th>Test Method</th>
<th>LD50 (mg/kg, rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>10000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>5000 mg/kg (rat)</td>
</tr>
</tbody>
</table>

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.
Sensitisation: Based on available data, the classification criteria are not met.
Additional toxicological information:
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us. The substance is not subject to classification according to the latest version of the EU lists.
CMR effects (carcinogenity, mutagenicity, and toxicity for reproduction):
Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No data

Aquatic toxicity:
No further relevant information available.

12.2 Persistence and Degradability
No further relevant information available.

12.3 Bioaccumulative Potential
No further relevant information available.

12.4 Mobility in Soil
No further relevant information available.
Safety data sheet
According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and US GHS
Fused Silica (See Page 1)

Additional ecological information:

<table>
<thead>
<tr>
<th>12.5 Results of PBT and vPvB</th>
<th>Generally not hazardous for water.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT: Not applicable.</td>
<td></td>
</tr>
<tr>
<td>vPvB: Not applicable.</td>
<td></td>
</tr>
</tbody>
</table>

12.6 Other Adverse Effects
No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods
Recommendation
Smaller quantities can be disposed of with household waste. Contact waste processors for recycling information. 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. Residual materials should be treated as hazardous.

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

SECTION 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Land Transport (ADR/RID)</th>
<th>Land Transport (Within USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>UN Number</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Proper Shipping Name</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
<td>Transport Hazard Class(es)</td>
</tr>
<tr>
<td>Packing Group</td>
<td>Packing Group</td>
</tr>
<tr>
<td>Hazard Label(s)</td>
<td>Hazard Label(s)</td>
</tr>
<tr>
<td>Environmental Hazards</td>
<td>Environmental Hazards</td>
</tr>
<tr>
<td>Special Precautions For User</td>
<td>Special Precautions For User</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sea Transport (IMDG)</th>
<th>Air Transport (ICAO/IATA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>UN Number</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Proper Shipping Name</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
<td>Transport Hazard Class(es)</td>
</tr>
<tr>
<td>Packing Group</td>
<td>Packing Group</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>Special Precautions For User</td>
<td>Special Precautions For User</td>
</tr>
</tbody>
</table>

(b)- ORM-D may be applicable within the USA for package sizes less than 30kg.
(c)– Consult with transport provider.
(d)– Check relevant regulations for Special Provisions.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health And Environmental Regulations/Legislation Specific For The Substance Or Mixture

USA

SARA
Section 355 (extremely hazardous substances) Substance is not listed.
Section 313 (Specific toxic chemical listings) Substance is not listed.
TSCA (Toxic Substance Control Act) Substance is listed.
Proposition 65 (California): Chemicals known to cause cancer: Substance is not listed.
### Safety data sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and US GHS

**Fused Silica (See Page 1)**

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for females:</th>
<th>Substance is not listed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals known to cause reproductive toxicity for males:</td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td>Chemicals known to cause developmental toxicity:</td>
<td>Substance is not listed.</td>
</tr>
</tbody>
</table>

**Carcinogenic Categories**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Substance Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>Substance is not listed.</td>
</tr>
<tr>
<td>IARC (International Agency for Research on Cancer)</td>
<td>7631-86-9 silicon dioxide (IARC-)</td>
</tr>
<tr>
<td>TLV (Threshold Limit Value established by ACGIH)</td>
<td>Substances is not listed.</td>
</tr>
<tr>
<td>MAK (German Maximum Workplace Concentration)</td>
<td>Substances is not listed.</td>
</tr>
<tr>
<td>NIOSH-Ca (National Institute for Occupational Safety and Health)</td>
<td>Substances is not listed.</td>
</tr>
</tbody>
</table>

**Canada**

<table>
<thead>
<tr>
<th>List</th>
<th>Substance Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Domestic Substances List (DSL)</td>
<td>Substance is listed.</td>
</tr>
</tbody>
</table>

**Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed.

<table>
<thead>
<tr>
<th>Section 16: OTHER INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>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. Additional information:</td>
</tr>
<tr>
<td><strong>The accumulation of airborne dust particles may lead to health and safety risks in some cases. The use of good industrial practices will mitigate this risk.</strong></td>
</tr>
<tr>
<td><strong>The health risks from inhalation of dust particles vary; this is due to particle concentration, exposure length, number of exposures and type of particles inhaled. Please read Section 2,4,6,7 and 8 of the SDS to understand these potential risks. Wear personal protective equipment and follow storage and handling procedures to maintain a safe workplace.</strong></td>
</tr>
<tr>
<td><strong>In rare instances, combustible dusts may represent a potential explosion hazard when airborne. This hazard is often associated with organic dust such as foodstuffs and coal, but may also occur with mineral products. While the majority of our products would be considered non-combustible, the overall airborne environment should be considered when determining the need for mitigation from the potential hazard. Consult recognized experts when necessary in order to determine any possible hazard. Please read the SDS for specific information concerning these hazards, and contact us with any further questions. We appreciate your continued business.</strong></td>
</tr>
</tbody>
</table>

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

WASHINGTON MILLS
CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Carc. 1A: Carcinogenicity, Hazard Category 1A

Sources
SDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com