1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier
Product Form:
Substance Name: FIBERLAY FUMED SILICA
Code(s): 157200, 15721, 15722, 15724, 15728

1.2 Recommended Use of the Chemical and Restrictions on use:

Relevant applications identified:
- Sealants
- Colored printing inks
- Paints and varnishes
- Adhesive
- Silicone rubber
- Cosmetic ingredient
- Cosmetics
- Agrochemicals

Function:
- Anticaking agent
- Anti-blocking agents
- Coating agent
- Dispersing agent
- Flow-promoting agent
- Reinforcing agent
- Carrier

1.3 Details of the Supplier of the Safety Data Sheet
Fiberlay Inc.
1468 Northgate Blvd
Sarasota, FL 34234
T 206-782-0660
F 888-782-0662
www.Fiberlay.com

1.4 Emergency Telephone Number
Emergency Number: CHEMTREC: Domestic - 800-424-9300
International: 703-527-3887

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation 29CFR 1910.1200
Remarks Not a hazardous substance or mixture.

2.2 Label elements
Statutory basis Classification according to Regulation 29CFR 1910.1200
Remarks Not a hazardous substance or mixture.

2.3 Other hazards
Silicon dioxide, chemically prepared Not a PBT, vPvB substance as per the criteria of the REACH Regulation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Cas No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicone dioxide (chemically prepared)</td>
<td>112945-52-5</td>
<td>100</td>
</tr>
</tbody>
</table>

Comments: Not a hazardous substance or mixture

Other information: A new CAS , 112945-52-5, has been assigned to amorphous, fumed silica to distinguish it from crystalline silica. According to the EPA, this product meets TSCA requirements and is listed on the TSCA inventory as silica with CAS 7631-86-9.

3.2 Mixtures
Not applicable

4. FIRST AID MEASURES

4.1 Description of First Aid Measures
Inhalation
In case product dust is released: Possible discomfort: cough, sneezing
Move victims into fresh air.

Skin contact
Wash off with soap and plenty of water.

Eye contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention.

Ingestion
If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water.
In case of discomfort, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed Symptoms
None known

4.3 Indication of any immediate medical attention and special treatment needed
No hazards which require special first aid measures.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media: Water spray, foam, CO2, dry powder. Adapt fire-extinguishing measures to surroundings
Unsuitable extinguishing media: Do not use full-force water jet in order to avoid dispersal and spread of the fire.

5.2 Special hazards arising from the substance or mixture
None known.

5.3 Advice for firefighters
As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment.

6.2 Environmental precautions
Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil. Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

6.3 Methods and material for containment and cleaning up
Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. HANDLING AND STORAGE

7.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment.

7.2 Environmental precautions
Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil. Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

7.3 Methods and material for containment and cleaning up
Sweep up or vacuum up spillage and collect in suitable container for disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Cas No.</th>
<th>Time Weighted Average (TWA)@Z3 Control Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon Dioxide, chemically prepared</td>
<td>112945-52-5</td>
<td>20 millions of particles per cubic foot of air</td>
</tr>
<tr>
<td></td>
<td>7631-86-9</td>
<td>0.8 mg/m³</td>
</tr>
</tbody>
</table>

The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

8.2 Exposure Controls

Personal Protective Equipment

Respiratory protection
A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable
state, color, form, odor, odor threshold, pH, melting point/ range, boiling point/ range, flash point, evaporation rate, flammability (solid, gas), lower explosion limit, upper explosion limit, vapor pressure, and vapor density. These properties can significantly impact the safety and environmental considerations of the material.

- **Physical state**: Solid
- **Color**: White
- **Form**: Powder
- **Odor**: Odorless
- **Odor Threshold**: Not applicable
- **pH (suspension)**: 3.7-4.5 (40 g/l) 20°C
- **Melting point/ range**: Ca. 1700°C
- **Boiling point/ range**: Not determined
- **Flash point**: Not applicable
- **Evaporation rate**: Not applicable
- **Flammability (solid, gas)**: Not applicable
- **Lower explosion limit**: Not applicable
- **Upper explosion limit**: Not applicable
- **Vapor pressure**: Not applicable
- **Vapor density**: Not applicable
- **Density**: Ca. 2.2 g/cm³ (20°C)
- **Water solubility**: >1mg/l
- **Partition coefficient: n-octanol/water**: Not applicable
- **Auto-ignition temperature**: Not applicable
- **Thermal decomposition**: >2000°C
- **Viscosity, dynamic**: Not applicable

By understanding these properties and following the appropriate handling and safety guidelines, users can ensure the safe and effective use of Fiberlay Fumed Silica. Always refer to the latest safety data sheet for the most current information and guidelines.
9.2 Other Information

Explosiveness: Not to be expected in view of the structure
Minimum ignition energy: Not applicable
Tapped density: Ca. 50g/l Method DIN / ISO 787 / 11

10. STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Stable under recommended storage conditions

10.3 Possibility of hazardous reactions
See Section 10.1 Reactivity

10.4 Conditions to avoid
No dangerous reactions known under conditions of normal use. Operations that create dust.

10.5 Incompatible materials
None known

10.6 Hazardous decomposition products
None known

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity:
- LD50 Rat: >3300 mg/kg
- LD50 Rat: >5000 mg/kg

LD50 Rat: >5000 mg/kg

Method: OECD Test Guideline 401 Comparable product

Acute inhalation toxicity:
- LC0 Rat: 0.139 mg/l 4h
Method: Analogous OECD (maximum conc. attainable in experiments)

No deaths occurred

Acute dermal toxicity:
LD50 Rabbit: >5000 mg/kg

Rabbit: Comparable product

Skin irritation:
Method: Analogous OECD
Not irritating

Eye irritation:
Rabbit: Analogous OECD
Not irritating

Sensitization:
Not known

Repeated dose toxicity:
Oral: No negative effects
Inhalation: No irreversible changes and no indication of silicosis

Assessment STOT Single exposure: No evidence for hazardous properties

Assessment STOT Repeat exposure: No evidence for hazardous properties
Risk of aspiration toxicity: No aspiration toxicity classification
Mutagenicity assessment: No evidence of mutagenic effects or reported in literature
Carcinogenicity: No negative effects
Carcinogenicity assessment: Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA
Toxicity to reproduction: No negative effects.
Human experience: Silicosis or other product specific illnesses of the respiratory tract have not been reported.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish: $\text{LC50 (Brachydanio rerio)}: > 10000 \text{ mg/l} / 96 \text{ h}$
Method: OECD 203 The reported toxic effects relate to the nominal concentration

Toxicity in aquatic invertebrates: $\text{EC50 Daphnia magna}: > 1000 \text{ mg/l} / 24 \text{ h}$
Method: OECD 202 The reported toxic effects relate to the nominal concentration.

12.2 Persistence and degradability

Biodegradability: The methods for determining biodegradability are not applicable to inorganic substances

12.3 Bio-accumulative potential

Bio-accumulation: Not to be accepted

12.4 Mobility in soil

Mobility: No remarkable mobility in soil is to be expected

12.5 Other adverse effects

Further Information The classification criteria are not met based on the available data

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:
Waste must be disposed of in accordance with federal, state, provincial and local regulations
Uncleaned packaging
Packaging material should be recycled or disposed of in accordance with federal, state and local regulations
14. TRANSPORT INFORMATION

Not dangerous according to transport regulations.

14.1 UN number: --
14.2 UN proper shipping name: --
14.3 Transport hazard class(es): --
14.4 Packing group: --
14.5 Environmental hazards (Marine pollutant): Yes
14.6 Special precautions for user: Not dangerous according to transport regulations.

15. REGULATORY INFORMATION

US Federal Regulations

OSHA
If listed below, chemical specific standards apply to the product or components:
- None listed

Clean Air Act Section (112)
If listed below, components present at or above the de minimus level are hazardous air pollutants:
- None listed

CERCLA Reportable Quantities
If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:
- None listed

SARA Title III Section 311/312 Hazard Categories
The product meets the criteria only for the listed hazard classes:
- No SARA Hazards

SARA Title III Section 313 Reportable Substances
If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
- None listed

Toxic Substances Control Act (TSCA)
If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:
- None listed

State Regulations

The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in section 2 and 15 of this MSDS.

HMIS Ratings
Health: 1
Flammability: 0
Physical Hazard: 0
NFP NIRatings
   Health: 1
   Flammability: 0
   Reactivity: 0

16. OTHER INFORMATION

Fiberlay Inc. believes the law requires us to inform you that detectable amounts of any of the listed chemicals might be present in Fiberlay products. Based on a review of the list, Fiberlay products, like all synthetic and naturally occurring chemical substances, may conceivably contain trace contaminants of some of the listed substances. While not necessarily added to our products as ingredients, some of the listed chemicals may be present in the raw materials as received from suppliers over which we have no control.

Preparation Date: May 15th, 2016
Prepared by: Kevin Aber
Comments: This Safety Data Sheet was prepared using information provided by Fiberlay Inc.

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