SAFETY DATA SHEET

TO COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR.1910.1200 & THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier
Substance Name: FIBERLAY PHENOLIC MICROSPHERES
Product Code(s): 15781, 15784, 15785, 15788, 157830

1.2 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

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

2. HAZARDS IDENTIFICATION

Not classified as hazardous for use/supply

Dust may cause irritation, experienced as stinging with excessive blinking and tear production.

Material may contain trace amount (<0.2%) of free formaldehyde, which is listed by IARC, NTP and OSHA as a carcinogen. There should be minimal risk when adequate ventilation is used due to the very low formaldehyde concentration.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Weight %</th>
<th>Risk Phrases</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully polymerized phenolic resin, inert</td>
<td>NA</td>
<td>NA</td>
<td>&gt;99.8</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Formaldehyde* | 50-00-0 | 200-001-8 | <0.2 | R45, R68, R23, R24, R25, R34, R43 | H350, H341, H331, H311, H301, H314, H317 |

Note*: Material is not considered hazardous in the classification of product as its concentration is below concentration cut-off point

Phenolic microspheres is an ‘article’ fulfilling the exemption of substance registration requirements under REACH article 7(1).
4. FIRST AID MEASURES

**Skin contact:**
Remove contaminated clothing. Wash skin with soap and water. Obtain medical attention if irritation persists. Wash clothing before reuse.

**Eye contact:**
Immediately flush eyes with water and continue for several minutes. Obtain medical attention if discomfort persists.

**Inhalation:**
If signs and symptoms develop, remove person to fresh air. If signs or symptoms persist, obtain medical attention.

**Ingestion:**
Do not induce vomiting unless instructed to do so by medical personnel. Unless unconscious, give victim lots of water. Obtain medical attention.

**Notes to physician:**
There is no specific antidote. Treatment or overexposure should be directed at the control of the symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

**Suitable Extinguishing media:**
Apply alcohol type or all-purpose type foams by manufacturers recommended techniques for large fires. Use carbon monoxide or dry chemical media for small fires.
Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread of fire.

**Extinguishing media to be avoided:**
None

**Unusual fire and explosion hazards:**
Avoid dispersion of dust in air to reduce potential of dust ignition / explosion.

**Special protective equipment for fire fighters:**
Use self-contained breathing apparatus and protective coating.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**
Wear suitable protective clothing.

**Methods for cleaning up:**
Ventilate with fresh air. Collect as much of the spilled material as possible. Use wet sweeping or water to avoid dusting. Collect and place in a closed container. Dispose as approved by your State Regulations.

7. HANDLING AND STORAGE

7.1 Handling

**General precaution:**
For industrial and professional use only. Avoid dispersion of dust in air. Electrically bond and ground equipment. Avoid sparks and flame under dust conditions. Use with adequate ventilation.

**Ventilation:**
Special, local ventilation is recommended in areas where containers are opened and their containers are discharged or in any areas where dusting conditions may occur.
Other precaution
[Caution] May undergo spontaneous smouldering if stored or heated in bulk above 35°C under conditions allowing air ingress to the product. Store package material in a cool, well-ventilated area.

Do not store in the sun.

Do not dry in package – use special drying instructions as below.

Microspheres will undergo oxidation at elevated temperatures. Due to the microspheres’ excellent insulating characteristics, the internal temperature of the mass can increase to the point where spontaneous ignition and smouldering can occur. The temperature at which this occurs is a function of the geometry, amount of material being heated and available oxygen. Smouldering appears as a soft glow similar to burning charcoal.

Drying instructions for the Phenoset microspheres:
To reduce the moisture content of this product to less than 4%, dry a two-inch layer of the product at a maximum temperature of 75°C for 24 hours. To prevent oven or product contamination, the metal drying tray should be covered with a cloth that will allow the product moisture to evaporate.

7.2 Storage
Keep container closed.

7.3 Specific use (s)
For industrial and professional use only.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values.
No exposure limit has been established.

8.2 Exposure controls

8.2.1 Occupational exposure controls
Respiratory protection: Dust respirator, if dusting occurs
Hand protection: General working gloves are acceptable.
Eye protection: Safety glasses
Other protective equipment: Eye bath and safety shower. Adequate ventilation.

8.2.2 Environmental exposure controls
None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Red brown, fine powder</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>Molecular weight:</td>
<td>&gt;10,000, Fully cured C-stage</td>
</tr>
<tr>
<td>Relative density:</td>
<td>0.20 – 0.80</td>
</tr>
<tr>
<td>Self-ignition temperature:</td>
<td>500°C (ASTM D1929)</td>
</tr>
</tbody>
</table>
Boiling point: Does not boil
Melting point: Does not melt
Solubility: Not soluble in water

10. STABILITY AND REACTIVITY

General: Stable
Conditions to avoid: None known
Materials to avoid: Strong acids and base, halogens, acyl halides
Hazardous decomposition products: Carbon monoxide, carbon dioxide, formaldehyde and phenol derivatives upon decomposition.
Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Effects from inhalation: Upper respiratory tract: irritation: signs / symptoms may include sneezing, cough, and nasal discharge.

Effects from ingestion: Gastrointestinal irritation.

Effects from skin contact: Mechanical skin irritation. May result in itching.

Effects from eye contact: Mechanical eye irritation. Signs and symptoms may include pain, redness and tears.

Significant data with possible relevance to human health: Formaldehyde has been shown to cause cancer in laboratory animals and mutations in a variety of in-vitro test systems. The relevance of these findings for human is unknown. Formaldehyde is listed as a carcinogen by IARC, NTP and OSHA.

12. ECOLOGICAL INFORMATION

Eco-toxicity: None known.
Mobility: Does not dissolve in water.
Persistence and degradability: Not determined.
Bio-accumulative potential: Unknown.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with appropriate National and local regulations.

14. TRANSPORT INFORMATION

UN Number, ADR/RID: Not restricted for transportation.
IMDG/ICAO: Not restricted for transportation.
MONT-BLANC: Not restricted for transportation.
15. REGULATORY INFORMATION

Label Elements [Regulations (EC) No. 1272/2008]
None – Not classified as hazardous

Inventory Listed In:
China IECSC, EU EINECS, US TSCA, Canada DSL, Japan ENCS, Korea KECL, Taiwan NECI, Philippine PICCS, Australia AICS, New Zealand NZIoC

16. OTHER INFORMATION

Text of R phrases referred to under headings 3

R45 May cause cancer
R68 Possible risk of irreversible effects
R23/24/25 Toxic by inhalation, in contact if swallowed
R34 Causes burns
R43 May cause sensitization by skin contact
H317 May cause an allergic skin reaction

Text of H phrases referred to under headings 3

H350 May cause cancer
H341 Suspected of causing genetic defects
H331 Toxic if inhaled
H311 Toxic in contact with skin
H301 Toxic if swallowed
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction

Product category:
Phenolic microspheres is an ‘article’ fulfilling the exemption of substance registration requirements under REACH article 7(1).

Text on Label:
CAUTION! May undergo spontaneous smoldering if stored or heated in bulk above 35C under conditions allowing air ingress to the product. Store in cool, well-ventilated area. Do not store in the sun. Do not dry in package – refer special drying instructions.

FOR INDUSTRIAL USE ONLY

Recommended usage and restrictions:
Please consult the product and/or applications information bulletins for this product.

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: July 21, 2016
Prepared by: Kevin Aber
Comments: This Safety Data Sheet was prepared using information provided by Fiberlay Inc.

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