SAFETY DATA SHEET

Date: June 2015

Section #1: PRODUCT AND COMPANY IDENTIFICATION

Lapmaster Wolters, LLC  
501 W. Algonquin Road  
Mt. Prospect, IL 60056  

Telephone: (847) 967-2975 (Office Hours 8:00 a.m. to 5:30 p.m. CST)  
24-Hour Emergency Number: Chemtrec – 1-800-424-9300  

Product Identification: Glycol Base Colloidal Silica Polishing Slurry  
Product Name: Colloidal Silica in Plastic Containers METS-COLL-SiO2-XXXX

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

GHS Labelling

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.3 Other hazards

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Non-Hazardous Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Amorphous, Precipitated</td>
<td>112926-06-8</td>
<td>30 - 50</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>30 - 50</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Remove soiled/soaked clothing immediately. If you do not feel well, seek medical attention (show the label where possible).

Inhalation: If inhaled, move person to fresh air. If they are having difficulty breathing, give oxygen (if available). Consult a doctor if symptoms continue or get worse.
5. **FIRE FIGHTING MEASURES**

5.1 **Extinguishing media**

Suitable extinguishing media: Water spray jet; foam; dry powder; carbon dioxide; product itself is non-combustible; fire extinguishing method of surrounding areas must be discussed.

5.2 **Special hazards arising from the substance or mixture**

Specific hazards during fire fighting: None known

5.3 **Advice for fire-fighters**

Protective equipment: Closed - full protective clothing (coat and pants) including helmet. Use self-contained breathing apparatus.

Further information: Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. **ACCIDENTAL RELEASE MEASURES**

6.1 **Personal precautions, protective equipment and emergency procedures**

Personal precautions: Refer to Section 8: Exposure Controls/Personal Protection.

6.2 **Environmental precautions**

Environmental precautions: Do not allow entry to drains, waterways, or soil.

6.3 **Methods and materials for containment and cleaning up**

Methods for cleaning up: Pick up with liquid binding materials and if necessary fill in containers capable of being locked. Containers in which split substance has been collected must be adequately labeled. Dispose of absorbed material in accordance with the regulations. Clean contaminated floors and objects thoroughly, observing environmental regulations.
6.4 Reference to other sections

Additional advice

- Information regarding safe handling, see Section 7.
  - Information regarding personal protective measures, see Section 8.
  - Information regarding waste disposal, see Section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling: Provide good ventilation of working area (local exhaust ventilation if necessary).
- Wear respiratory protection when spraying.

Advice on protection against fire and explosion: Observe the general rules of industrial fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
- Keep only in unopened original container.
  - Use polyolefin containers.
  - Do not use steel containers.

Further information on storage conditions:
- Keep container tightly closed and dry in a cool, well-ventilated place. Protect against frost. The product after freezing is no longer usable.

Advice on common storage:
- Do not store or transport together with food stuffs.

7.3 Specific end uses
- Determined by user

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Guidelines

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No</th>
<th>Control Parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Amorphous, Precipitated</td>
<td>112926-00-8</td>
<td>TWA: 10 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 6 mg/m³</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 6 mg/m³ 8 hours</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 6 mg/m³ 10 hours</td>
<td>NIOSH</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Engineering measures

- Provide good ventilation of working area (local exhaust ventilation if necessary).

Personal protective equipment

Respiratory protection: Use respiratory protection in case of insufficient exhaust

Hand protection:
- Break through time: >10 min.
  - Glove thickness: > 0.4 mm
  - For short-term exposure (splash protection): Nitrile rubber gloves
  - Remarks: These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.

Eye protection: Tightly fitting safety glasses

Skin and body protection: Protective clothing

Hygiene measures:
- When using do not eat, drink or smoke. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Use barrier skin cream.

Protective measures: Avoid contact with eyes and skin. Observe the usual precautions for handling chemicals.
Environmental exposure controls

General advice: Do not allow entry to drains, water courses or soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Blue</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
</tbody>
</table>

**Safety data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper/lower flammability</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>app. 10 - 10.5 at 68 °F (20 °C)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Freezing point</td>
<td>app. 32 °F (0 °C)</td>
</tr>
<tr>
<td>Solubility/ies</td>
<td>Miscible in all proportions</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>approx. 212 °F (100 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Water-based material containing no combustible components. Compatible with extinguishing agents.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>N/A - liquid</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>N/A - non-flammable liquid</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>low, &lt;50 cps</td>
</tr>
</tbody>
</table>

9.2 Other information

No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions: No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid

   Conditions to avoid : Protect from freezing or frost.

10.5 Incompatible materials

   Materials to avoid : No further relevant information available.

10.6 Hazardous decomposition products

   Hazardous decomposition products : No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

   Data for Silica, Amorphous, Precipitated (112926-00-8)

      Acute oral toxicity : LDLo > 3,300 mg/kg (rat)
      Acute inhalation toxicity : LC50 / 4h > 2 mg/l (rat)
      Acute dermal toxicity : LD50 > 5,000 mg/kg (rat)
      Skin irritation : Prolonged and/or repeated skin contact may cause irritation.
      Eye irritation : Short time, reversible irritation

12. ECOLOGICAL INFORMATION

12.1 Toxicity

      Aquatic toxicity : No further relevant information available.

12.2 Persistence and degradability

      Biodegradability : Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
      Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

12.3 Bioaccumulative potential : No further relevant information available.

12.4 Mobility in soil : No further relevant information available.

12.5 Results of PBT and vPvB assessment

      PBT: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
      vPvB: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

      No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

      Additional information : Neutralize
         Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent authorities.

      Contaminated packaging : Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

14. TRANSPORT INFORMATION

Page 5 of 7
15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United States : The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for the substance(s) that makes/make up this material or for the material itself.

16. OTHER INFORMATION

Decimal notation: "Thousands" places are identified with a dot (example: 2,000 mg/kg means "two thousand mg/kg"). Decimal places are identified with a comma (example: 1,35 g/cm³)
DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. LAPMASTER WOLTERS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the LAPMASTER WOLTERS is fit for a particular purpose and if it is suitable for the method of use or application. Given the variety of factors that can affect the use and application of a LAPMASTER WOLTERS product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the LAPMASTER WOLTERS product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

LAPMASTER WOLTERS provides information in electronic form as a service to our customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, LAPMASTER WOLTERS makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from LAPMASTER WOLTERS.