Section 1 - Chemical Product and Company Identification

MSDS Name:  
Silica Standards, 10ppm to 1000ppm

Catalog Numbers:  
LC22390, LC22400

Synonyms:  
None

Company Identification:  
LabChem Inc  
200 William Pitt Way  
Pittsburgh, PA 15238

Company Phone Number:  
(412) 826-5230

Emergency Phone Number:  
(800) 424-9300

CHEMTREC Phone Number:  
(800) 424-9300 or 011-703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>&gt;99</td>
</tr>
<tr>
<td>13517-24-3</td>
<td>Sodium metasilicate nonahydrate</td>
<td>0.005 - 1</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: clear, colorless solution  
Caution! May cause irritation to eyes, skin, and gastrointestinal tract.  
Target Organs: Eyes, skin, mucous membranes

Potential Health Effects

Eye:  
May cause eye irritation.

Skin:  
May cause skin irritation.

Ingestion:  
May cause gastrointestinal tract irritation.

Inhalation:  
May cause respiratory tract irritation.

Chronic:  
Chronic inhalation may cause lung damage, bronchitis, and silicosis. May decrease blood clotting.
Material Safety Data Sheet
Silica Standards, 10ppm to 1000ppm

Section 4 - First Aid Measures

**Eyes:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

**Skin:**
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:**
Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

**Inhalation:**
Move victim to fresh air immediately. Get medical aid if irritation or other symptoms appear.

**Notes to Physician:**
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

**General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:**
In case of fire, use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Autoignition Temperature:**
Not applicable.

**Flash Point:**
Not applicable.

**NFPA Rating:**
CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0
CAS# 13517-24-3: Health- 3, Flammability- 0, Instability- 0

**Explosion Limits:**
Lower: n/a  Upper: n/a

Section 6 - Accidental Release Measures

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.

Section 7 - Handling and Storage
Material Safety Data Sheet  
Silica Standards, 10ppm to 1000ppm

Handling:  
Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:  
Store in a tightly closed container in a cool, dry area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:  
Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels low.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>None of the chemicals are on this list</td>
<td>None of the chemicals are on this list</td>
<td>None of the chemicals are on this list</td>
</tr>
<tr>
<td>Sodium metasilicate nonahydrate</td>
<td>None of the chemicals are on this list</td>
<td>None of the chemicals are on this list</td>
<td>None of the chemicals are on this list</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:  
None

Personal Protective Equipment

Eyes:  
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

Skin:  
Wear appropriate protective gloves to prevent skin exposure.

Clothing:  
Wear appropriate protective clothing to prevent skin exposure.

Respirators:  
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH</td>
<td>Alkaline</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>1.0</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>Na2SiO3.9H2O</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>284.1839</td>
</tr>
</tbody>
</table>
Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible substances.

Incompatibilities with Other Materials:
Acids, metals.

Hazardous Decomposition Products:
Silicon dioxide.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5: ZC0110000.
CAS# 13517-24-3: unlisted.

LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 13517-24-3:
No information found.

Carcinogenicity:
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 13517-24-3: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:
No information found.

Teratogenicity:
No information found.

Reproductive:
No information found.

Mutagenicity:
No information found.

Neurotoxicity:
No information found.

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations
Material Safety Data Sheet
Silica Standards, 10ppm to 1000ppm

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 13517-24-3 is not listed on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR 720.3(u)(2)).

SARA Reportable Quantities (RQ):
None of the components are on this list.

CERCLA/SARA Section 313:
None of the components are on this list.

OSHA - Highly Hazardous:
None of the components are on this list.

US State
State Right to Know:
Not available

California Regulations:
None

European/International Regulations
Canadian DSL/NDSL:
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 13517-24-3 is not listed on Canada's DSL or NDSL Lists.

Canada Ingredient Disclosure List:
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 13517-24-3 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: December 22, 1999
Revision Date: September 7, 2010

Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.