1 Identification

· Product name: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron
· Part number: 180-25000, 180-25010, 180-25015
· Application of the substance / the mixture: Polishing solution
· Details of the supplier of the safety data sheet
· Manufacturer/Supplier:
  Allied High Tech Products Inc.
  2376 East Pacifica Place
  USA-RANCHO DOMINGUEZ, CA 90220
  USA
  info@alliedhihtech.com
· Information department: Product safety department
· Emergency telephone number:
  During normal opening times: +1 (310) 635-2466
  Chemtrec: +1 (202) 483-7616

2 Hazard(s) identification

· Classification of the substance or mixture: The product is not classified, according to the Globally Harmonized System (GHS).

· Label elements
  · GHS label elements: Void
  · Hazard pictograms: Void
  · Signal word: Void
  · Hazard statements: Void
· Classification system:
· NFPA ratings (scale 0 - 4)
  Health = 0
  Fire = 0
  Reactivity = 0
· HMIS-ratings (scale 0 - 4)
  HEALTH: Health = 0
  FIRE: Fire = 0
  REACTIVITY: Reactivity = 0
· Other hazards
  · Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures
· Description: Mixture of the substances listed below with nonhazardous additions.
Product name: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron

- Hazardous Components:
  
  | 7631-86-9  | silicon dioxide, chemically prepared | 25-50% |

- Non-hazardous Components:
  
  | 7732-18-5  | water, distilled, conductivity or of similar purity | 50-100% |

4 First-aid measures

- 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: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.
- Protective Action Criteria for Chemicals
  
  | PAC-1:          |          |
  | 7631-86-9  | silicon dioxide, chemically prepared | 18 mg/m³ |
  
  | PAC-2:          |          |
  | 7631-86-9  | silicon dioxide, chemically prepared | 740 mg/m³ |
  
  | PAC-3:          |          |
  | 7631-86-9  | silicon dioxide, chemically prepared | 4,500 mg/m³ |

7 Handling and storage

- Handling:
  - Precautions for safe handling: No special measures required.
  - Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles:
      Store in a cool location.
      No special requirements.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions: Protect from extreme temperatures.
8 Exposure controls/personal protection

· Specific end use(s) No further relevant information available.

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-86-9 silicon dioxide, chemically prepared</td>
<td></td>
</tr>
<tr>
<td>PEL</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>TLV</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

· Personal protective equipment:

· General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment:

Not required.
Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands: Not required.

· Material of gloves: Neoprene gloves

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

  · Form: Suspension
  · Color: White
  · Odor: Odorless
  · Odor threshold: Not determined.

· pH-value at 20 °C (68 °F): 9.5

· Change in condition

  · Melting point/Melting range: Undetermined.
  · Boiling point/Boiling range: 100 °C (212 °F)

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

  · Lower: Not determined.
  · Upper: Not determined.

· Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

· Density: Not determined.

· Bulk density: 1,300 kg/m³

· Relative density: 1300 kg

· Vapor density: Not determined.

· Specific gravity: 1.3
**Product name:** Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron

<table>
<thead>
<tr>
<th><strong>Evaporation rate</strong></th>
<th>Slow (Butyl Acetate = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
<td>Fully miscible.</td>
</tr>
<tr>
<td><strong>Water:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dynamic at 20 °C (68 °F):</strong></td>
<td>&lt;20 mPas</td>
</tr>
<tr>
<td><strong>Kinematic:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solvent content:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Water:</strong></td>
<td>60.0 %</td>
</tr>
<tr>
<td><strong>VOC content:</strong></td>
<td>0.00 %</td>
</tr>
<tr>
<td></td>
<td>0.0 g/l / 0.00 lb/gal</td>
</tr>
<tr>
<td><strong>Solids content:</strong></td>
<td>54.5 %</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Freezing conditions
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

<table>
<thead>
<tr>
<th><strong>LD/LC50 values that are relevant for classification:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATE (Acute Toxicity Estimate):</strong></td>
</tr>
<tr>
<td>Dermal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>7631-86-9 silicon dioxide, chemically prepared</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral</strong></td>
</tr>
<tr>
<td>Dermal</td>
</tr>
</tbody>
</table>

- **Primary chemical irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  - Abrasive eye irritant
  - Abrasive skin irritant

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

<table>
<thead>
<tr>
<th><strong>IARC (International Agency for Research on Cancer):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-86-9 silicon dioxide, chemically prepared</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

- **NTP (National Toxicology Program):**
  - None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**
  - None of the ingredients is listed.

(Contd. on page 5)
12 Ecological information

· Toxicity
· Aquatic toxicity: No further relevant information available.
· Persistence and degradability: No further relevant information available.
· Behavior in environmental systems:
· Bioaccumulative potential: No further relevant information available.
· Mobility in soil: No further relevant information available.
· Additional ecological information:
· General notes:
  Water hazard class 1 (Self-assessment): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.
· Other adverse effects: No further relevant information available.

13 Disposal considerations

· Waste treatment methods
· Recommendation: Contact waste processors for recycling information.
· Uncleaned packagings:
· Recommendation: Disposal must be made according to official regulations.
· Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number
· DOT, IMDG, IATA: not regulated
· UN proper shipping name
· DOT, IMDG, IATA: not regulated
· Transport hazard class(es)
· DOT, ADN, IMDG, IATA
· Class: not regulated
· Packing group
· DOT, IMDG, IATA: not regulated
· Environmental hazards:
· Marine pollutant: No
· Special precautions for user
· Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
· Not applicable.
· UN "Model Regulation":
· Not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
· Sara
· Section 355 (extremely hazardous substances):
  None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):
  None of the ingredients is listed.
Product name: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron

- **TSCA (Toxic Substances Control Act):**
  All components have the value ACTIVE.

- **Hazardous Air Pollutants**
  None of the ingredients is listed.

- **Proposition 65**
  None of the ingredients is listed.

- **Chemicals known to cause cancer:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  None of the ingredients is listed.

- **Carcinogenic categories**
  None of the ingredients is listed.

- **EPA (Environmental Protection Agency)**
  None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**
  None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  None of the ingredients is listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

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.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Kim Derrit
- **Last revision:** 04/30/2020 / 2.0
- **Abbreviations and acronyms:**
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit