1 Identification

- **Product name**: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron
- **Part number**: 180-25000, -25010, -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@alliedhightech.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 = 0
    - Fire = 0
    - Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT**: Not applicable.
Product name: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures
· Description: Mixture of the substances listed below with nonhazardous additions.

· Hazardous Components:
  7631-86-9 silicon dioxide, chemically prepared  
  Acute Tox. 4, H332 25-50%

· Non-hazardous Components:
  Proprietary Ingredient 25-50%
  7732-18-5 water, distilled, conductivity or of similar purity 25-50%

· Additional information:
  The specific chemical identity and/or exact percentage of the composition has been withheld as a trade secret.

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
**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.  
    - **Information about storage in one common storage facility:** Not required.  
    - **Further information about storage conditions:** Product may freeze if stored below 0 °C  
    - **Specific end use(s)**: No further relevant information available.  

**8 Exposure controls/personal protection**

- **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:**  
    - **7631-86-9 silicon dioxide, chemically prepared**  
      - **PEL** Long-term value: 6 mg/m³  
      - **TLV** Long-term value: 10 mg/m³  

- **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.  
    - **Protection of hands:**  
      - **Protective gloves**  

  - **Material of gloves**  
    The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.  

- **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.
# Physical and chemical properties

- **General Information**
  - **Appearance:** Suspension
  - **Color:** White
  - **Odor:** Mild
  - **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.

- **Ignition temperature:** >370 °C (>698 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **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.
  - **Relative density:** 1.2
  - **Vapor density:** Not determined.
  - **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with**
  - **Water:** Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**
  - **Dynamic:** Not determined.
  - **Kinematic:** Not determined.

- **Solvent content:**
  - **Water:** 45.5 %
  - **VOC content:** 0.00 %
  - **0.0 g/l / 0.00 lb/gl**

- **Solids content:** 54.5 %

- **Other information**
  - No further relevant information available.

# Stability and reactivity

- **Reactivity:** No further relevant information available.

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
Product name: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron

Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: Freezing conditions
Incompatible materials: Acidic, cationic and salt materials may gel the product.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects
Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (Acute Toxicity Estimate)</td>
</tr>
<tr>
<td>Dermal LD50 7,370 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h 40.3 mg/l</td>
</tr>
</tbody>
</table>

7631-86-9 silicon dioxide, chemically prepared

<table>
<thead>
<tr>
<th>Toxicity effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>7,000 mg/kg (mouse)</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>2,010 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>11 mg/l (ATE)</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:
  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>IARC (International Agency for Research on Cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-86-9 silicon dioxide, chemically prepared</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

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.

(Contd. on page 6)
Product name: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron

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, ADN, IMDG, IATA: not regulated

- **UN proper shipping name**
  - DOT, ADN, IMDG, IATA: not regulated

- **Transport hazard class(es)**
  - DOT, ADN, IMDG, IATA: not regulated

- **Packing group**
  - DOT, IMDG, IATA: not regulated

- **Environmental hazards:**
  - Marine pollutant: No

- **Special precautions for user**
  - Not applicable.

- **Stowage Category**
  - A

- **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.

- **TSCA (Toxic Substances Control Act):**
  - 7631-86-9 silicon dioxide, chemically prepared
  - 7732-18-5 water, distilled, conductivity or of similar purity

- **TSCA new (21st Century Act) (Substances not listed)**
  - Proprietary Ingredient
Product name: Colloidal Silica Suspension, Non-stick/Rinsable, 0.04 micron

· Proposition 65
  · 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
  · 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 Dermit
· Date of preparation / last revision 06/15/2018 /
· Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  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
  Acute Tox. 4: Acute toxicity – Category 4