1 Identification

- Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 micron
- Part number: 180-20000, 180-20010, 180-20015
- 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

3 Composition/information on ingredients

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

| Hazardous components and components with occupational exposure limits: |  
| 7631-86-9 | silicon dioxide, chemically prepared | 40-50% |
| 57-55-6 | propylene glycol | 10-20% |

| Non-hazardous components: |  
| 7732-18-5 | water, distilled, conductivity or of similar purity | 40-50% |
| Dye | ≤1% |

- 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.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 micron

- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    Eye irritation
    Dermatitis
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:
  - Alcohol resistant foam
  - Carbon dioxide
  - Fire-extinguishing powder
  - Water spray
  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.

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:
    - Use polyolefine receptacles.
    - Unsuitable material for receptacle: steel.
  - Information about storage in one common storage facility:
    - Store away from oxidizing agents.
    - Store away from foodstuffs.
- Further information about storage conditions: None.
- 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*3** mg/m³
        *total **respirable
      - 57-55-6 propylene glycol
        - WEEL Long-term value: 10 mg/m³

(Contd. of page 1)
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 micron

- **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**
  Recommended thickness of the material: ≥ 0.4 mm
  Nitrile rubber, NBR
- **Penetration time of glove material** Break through time: >10 min.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - **Form:** Suspension
  - **Color:** Light blue
  - **Odor:** Odorless
  - **Odor threshold:** Not determined.

<table>
<thead>
<tr>
<th>· pH-value at 20 °C (68 °F):</th>
<th>9</th>
</tr>
</thead>
</table>

- **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 selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.

- **Vapor pressure:** Not determined.

- **Density at 20 °C (68 °F):** 1.3 g/cm³ (10.849 lbs/gal)
- **Relative density** Not determined.
- **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:**
  - **Organic solvents:** 13.5 %
  - **Water:** 45.1 %
  - **VOC content:** 13.51 %
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 micron

<table>
<thead>
<tr>
<th>Solids content:</th>
<th>40.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other information</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**:
    - **LD/LC50 values that are relevant for classification**:
      - **Oral**
        - LD50 >5,000 mg/kg (rat)
      - **Dermal**
        - LD50 >4,933 mg/kg (rabbit)
    - **7631-86-9 silicon dioxide, chemically prepared**
      - **Oral**
        - LD50 >7,000 mg/kg (mouse)
      - **Dermal**
        - LD50 >2,000 mg/kg (rabbit)
    - **57-55-6 propylene glycol**
      - **Oral**
        - LD50 >2,000 mg/kg (rat)
      - **Dermal**
        - LD50 20,800 mg/kg (rabbit)
  - **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**
  - **IARC (International Agency for Research on Cancer)**
    - 7631-86-9 silicon dioxide, chemically prepared 3
  - **NTP (National Toxicology Program)**
    - None of the ingredients is listed.
  - **OSHA-Ca (Occupational Safety & Health Administration)**
    - None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
  - **Persistence and degradability**: Not easily biodegradable.
  - **Behavior in environmental systems**:
  - **Bioaccumulative potential**: No further relevant information available.
  - **Mobility in soil**: No further relevant information available.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 micron

- 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
  - No further relevant information available.

- 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):
  - All components have the value ACTIVE.

- Hazardous Air Pollutants
  - None of the ingredients is listed.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 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.
  · 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: Technical Services
· Contact: Pablo Mendoza
· Last revision / supersedes version: 06/01/2022 / 3.1
· Supersedes date: 06/10/2020

· Abbreviations and acronyms:
  ADR: Accord relatif au transport international 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
  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)
  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
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
· * Data compared to the previous version altered.