1 Identification

- Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.02 micron
- Part number: 180-40000, 180-40010, 180-40015
- 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

3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Hazardous components and components with occupational exposure limits:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-86-9</td>
<td>silicon dioxide, chemically prepared</td>
</tr>
<tr>
<td>57-55-6</td>
<td>propylene glycol</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>water, distilled, conductivity or of similar purity</td>
</tr>
</tbody>
</table>

- Non-hazardous components:

<table>
<thead>
<tr>
<th>Non-hazardous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>water, distilled, conductivity or of similar purity</td>
</tr>
</tbody>
</table>

- 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.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.02 micron

- 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 foodstuffs.
  - Further information about storage conditions: Protect from frost.
  - 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

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-86-9 silicon dioxide, chemically prepared</td>
</tr>
<tr>
<td><strong>PEL</strong></td>
</tr>
<tr>
<td><strong>WEEL</strong></td>
</tr>
</tbody>
</table>

- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.02 micron

· Breathing equipment: Not required.
  Use suitable respiratory protective device in case of insufficient ventilation.
· Protection of hands: Not required.
· Material of gloves
  Nitrile rubber, NBR
  Recommended thickness of the material: ≥ 0.4 mm
· 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.
· pH-value at 20 °C (68 °F): 10.5
· 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 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 at 20 °C (68 °F): 1.2 g/cm³ (10.014 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: 16.7 %
  Water: 54.2 %
  VOC content: 16.67 %
· Solids content: 29.2 %
· Other information No further relevant information available.

(Contd. of page 2)
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:
      - 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 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 5)
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.

  - 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.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.02 micron

- **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 / 2.1
- **Supersedes date:** 04/11/2022

### 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