1 Identification

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

  ![GHS07](image)

  STOT SE 3  H335  May cause respiratory irritation.

  Eye Irrit. 2B  H320  Causes eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

  ![GHS07](image)

- **Signal word** Warning
- **Hazard statements**
  - Causes eye irritation.
  - May cause respiratory irritation.
- **Precautionary statements**
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Wash thoroughly after handling.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 micron

Use only outdoors or in a well-ventilated area.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
  · NFPA ratings (scale 0 - 4)
    Health = 1
    Fire = 0
    Reactivity = 0
  · HMIS-ratings (scale 0 - 4)
    HEALTH U Health = 1
    FIRE U Fire = 0
    REACTIVITY U 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.

  · 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
  · 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.

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### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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:** No special measures required.
- **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 precautions are necessary if used correctly.
- **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:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **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 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:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:**
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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 breakthrough 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

- **General Information**

  - **Appearance**:
    - Form: Suspension
    - Color: Light blue
    - Odor: Odorless
    - Odour threshold: Not determined.

- **pH-value at 20 °C (68 °F)**: > 9.6

- **Change in condition**
  - Melting point/Melting range: 0 °C (32 °F)
  - Boiling point/Boiling range: 100 °C (212 °F)

- **Flash point**: Not applicable.

- **Flammability (solid, gaseous)**: Not applicable.

- **Ignition temperature**
  - 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)**: 1.36 g/cm³ (11.349 lbs/gal)

- **Relative density**: Not determined.

- **Vapour density**: Not determined.

- **Evaporation rate**: Not determined.

- **Solubility in / Miscibility with Water**: Not miscible or difficult to mix.

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

- **Viscosity**:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
Product name: Colloidal Silica Suspension, Non-Crystallizing, 0.05 micron

- Solvent content:
  - Organic solvents: 0.0 %
  - Water: 60.0 %

- Solids content: 40.0 %

- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity
  - 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: No further relevant information available.

- Incompatible materials: No further relevant information available.

- Hazardous decomposition products: Carbon monoxide and carbon dioxide

- Additional information: Hazardous decomposition products occur during combustion.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - Primary irritant effect:
      - on the skin: No irritant effect.
      - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.

- Additional toxicological information:
  - 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: Generally not hazardous for water
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
13 Disposal considerations

- Waste treatment methods
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

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.

- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
- Not applicable.

- UN "Model Regulation":
- -

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):
  All ingredients are 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.

(Contd. on page 7)
41.0

· 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 06/23/2015 / -
· 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)
  Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
  STOT SE 3: Specific target organ toxicity - Single exposure; Hazard Category 3