

**Safety Data Sheet**  
*acc. to OSHA HCS*

Printing date 07/02/2024

Version 4.0

Last revision 06/01/2024

**\* 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.  
16207 Carmenita Road  
USA-Cerritos, CA, 90703  
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.

| · <b>Hazardous components and components with occupational exposure limits:</b> |                                      |        |
|---|--------------------------------------|--------|
| 7631-86-9   | silicon dioxide, chemically prepared | 20-30% |
| 57-55-6   | propylene glycol                     | 10-20% |

| · <b>Non-hazardous components:</b> |   |        |
|------------------------------------|---|--------|
| 7732-18-5                          | water, distilled, conductivity or of similar purity | 50-60% |

- **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.

(Contd. on page 2)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/02/2024

Version 4.0

Last revision 06/01/2024

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

(Contd. of page 1)

- **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 necessary.
- **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 additional data. See 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/m <sup>3</sup><br>*total **respirable |
|-----|---|

**57-55-6 propylene glycol**

|      |                                       |
|------|---------------------------------------|
| WEEL | Long-term value: 10 mg/m <sup>3</sup> |
|------|---------------------------------------|

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/02/2024

Version 4.0

Last revision 06/01/2024

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

(Contd. of page 2)

- **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:  $\geq 0.4$  mm
- **Penetration time of glove material** Break through time:  $>10$  min.
- **Eye protection:** Goggles recommended during refilling.

## 9 Physical and chemical properties

|   |   |
|---|---|
| · <b>Information on basic physical and chemical properties</b>    |   |
| · <b>General Information</b>                                      |   |
| · <b>Appearance:</b>  |   |
| <b>Form:</b>  | Suspension                                    |
| <b>Color:</b>   | Light blue                                    |
| · <b>Odor:</b>  | Odorless                                      |
| · <b>Odor threshold:</b>  | Not determined.                               |
| · <b>pH-value at 20 °C (68 °F):</b>                               | 10.5  |
| · <b>Change in condition</b>                                      |   |
| <b>Melting point/Melting range:</b>                               | Undetermined.                                 |
| <b>Boiling point/Boiling range:</b>                               | 100 °C (212 °F)                               |
| · <b>Flash point:</b>   | Not applicable.                               |
| · <b>Flammability (solid, gaseous):</b>                           | Not applicable.                               |
| · <b>Decomposition temperature:</b>                               | Not determined.                               |
| · <b>Ignition temperature:</b>                                    | Product is not selfigniting.                  |
| · <b>Danger of explosion:</b>                                     | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>  |   |
| <b>Lower:</b>   | Not determined.                               |
| <b>Upper:</b>   | Not determined.                               |
| · <b>Vapor pressure at 20 °C (68 °F):</b>                         | 23 hPa (17.3 mm Hg)                           |
| · <b>Density at 20 °C (68 °F):</b>                                | 1.2 g/cm <sup>3</sup> (10.014 lbs/gal)        |
| · <b>Relative density</b>   | Not determined.                               |
| · <b>Vapor density</b>  | Not determined.                               |
| · <b>Evaporation rate</b>   | Not determined.                               |
| · <b>Solubility in / Miscibility with</b>                         |   |
| <b>Water:</b>   | Fully miscible.                               |
| · <b>Partition coefficient (n-octanol/water):</b> Not determined. |   |
| · <b>Viscosity:</b>   |   |
| <b>Dynamic:</b>   | Not determined.                               |
| <b>Kinematic:</b>   | Not determined.                               |
| · <b>Solvent content:</b>   |   |
| <b>Organic solvents:</b>  | 16.7 %  |
| <b>Water:</b>   | 54.2 %  |
| <b>VOC content:</b>   | 16.67 %                                       |
| <b>Solids content:</b>  | 29.2 %  |
| · <b>Other information</b>  | No further relevant information available.    |

(Contd. on page 4)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/02/2024

Version 4.0

Last revision 06/01/2024

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

(Contd. of page 3)

### 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:**

|   |
|---|
| · <b>LD/LC50 values that are relevant for classification:</b> |
|---|

|  |  |  |
|--|--|--|
| 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**

|   |  |  |
|---|--|--|
| · <b>IARC (International Agency for Research on Cancer)</b> |  |  |
|---|--|--|

|           |                                      |   |
|-----------|--------------------------------------|---|
| 7631-86-9 | silicon dioxide, chemically prepared | 3 |
|-----------|--------------------------------------|---|

|  |  |  |
|--|--|--|
| · <b>NTP (National Toxicology Program)</b> |  |  |
|--|--|--|

|                                    |  |  |
|------------------------------------|--|--|
| None of the ingredients is listed. |  |  |
|------------------------------------|--|--|

|  |  |  |
|--|--|--|
| · <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b> |  |  |
|--|--|--|

|                                    |  |  |
|------------------------------------|--|--|
| 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)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/02/2024

Version 4.0

Last revision 06/01/2024

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

(Contd. of page 4)

- **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

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

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **Sara**

|  |
|--|
| · <b>Section 355 (extremely hazardous substances):</b>               |
| None of the ingredients is listed.                                   |
| · <b>Section 313 (Specific toxic chemical listings):</b>             |
| None of the ingredients is listed.                                   |
| · <b>TSCA (Toxic Substances Control Act):</b>                        |
| All components have the value ACTIVE.                                |
| · <b>Hazardous Air Pollutants</b>                                    |
| None of the ingredients is listed.                                   |
| · <b>Proposition 65</b>  |
| · <b>Chemicals known to cause cancer:</b>                            |
| None of the ingredients is listed.                                   |
| · <b>Chemicals known to cause reproductive toxicity for females:</b> |
| None of the ingredients is listed.                                   |
| · <b>Chemicals known to cause reproductive toxicity for males:</b>   |
| None of the ingredients is listed.                                   |

(Contd. on page 6)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/02/2024

Version 4.0

Last revision 06/01/2024

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

(Contd. of page 5)

**· 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

To the best of our knowledge, the information contained herein is accurate. However, it does not describe a guarantee of product properties and does not establish a contractual legal relationship.

**· Department issuing SDS:** Technical Services**· Contact:** Pablo Mendoza**· Last revision / supersedes version:** 06/01/2024 / 3.0**· Supersedes date:** 06/01/2022**· 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 &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

**· \* Data compared to the previous version altered.**