## SECTION 1: Identification

**Product name:** Synthetic Amorphous Silica
**Product code:** N0142
**Other means of identification:** Flo-Gard: All grades; Hi-Sil: All grades; Lo-Vel 27; Lo-Vel 29; Lo-Vel 39A; Lo-Vel 275; Lo-Vel 2000; Lo-Vel 2003; Lo-Vel 6000; Lo-Vel 6200; Lo-Vel HSF; Silene 732D

According to REACH-Regulation (EC) 1907/2006 this substance contains nanoforms (nano structured). The product does not fall under the definition of "engineered nanomaterial" according to the food information regulation (EU) 1169/2011.

**Product type:** Powder.

**Relevant identified uses of the substance or mixture and uses advised against**

**Product use:** Industrial applications.
**Use of the substance/mixture:** Additive
**Uses advised against:** Not applicable

**Manufacturer:**

**QEMETICA US Silica LLC**
3150 Pete Manena Road,
Westlake, LA 70669, USA
Customer Service: 1-800-243-6745

**QEMETICA NL SIlica B.V.**
Valgenweg 1-3, 9936 HV Farmsum
The Netherlands
Postal Adress: P.O. Box 181, 9930AD Delfzijl, The Netherlands
Customer Service: +31-596-676710
Technical Service: +31-596-676710

**E-mail address for the person responsible for the safety data sheet:**
sds@qemetica.com

**Emergency telephone number**

**Washington DC:** +1 703-741-5970 (Chemtrec Emergency number, CCN1020385)

## SECTION 2: Hazards identification

**OSHA/HCS status:** While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture:** Not classified.

**GHS label elements:**

Signal word: No signal word.

Hazard statements: No known significant effects or critical hazards.

**Precautionary statements**

Prevention: Not applicable.
Response: Not applicable.
Storage: Not applicable.
Disposal: Not applicable.

Supplemental label Elements: No known significant effects or critical hazards.

Hazards not otherwise Classified: Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

## SECTION 3: Composition/information on ingredients

**Substance/mixture** Substance
**Product name:** Synthetic Amorphous Silica
**CAS number/other identifiers**
**CAS number:** 7631-86-9 / 112926-00-8

| Ingredient name | % | CAS number |
|---|---|---|
| Silica, amorphous, precipitated and gel | 60 - 100 | 112926-00-8 |

Contains no detectable crystalline silica (detection limit <0.1% by weight).
SUB codes represent substances without registered CAS Numbers.
Any concentration shown as a range is to protect confidentiality or is due to batch variation.
**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**
**Occupational exposure limits, if available, are listed in Section 8.**

## SECTION 4: First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

**Description of necessary measures**

**Eye contact:** Protect the non-irritated eye, remove contact lenses. Rinse the contaminated eyes carefully with water for 10-15 minutes. Avoid strong streams of water – the risk of damaging the cornea. After rinsing put on an aseptic – sterile dressing and seek immediate medical advice.

**Inhalation:** Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin

cleanser. Do NOT use solvents or thinners.

**Ingestion:** If swallowed, seek medical advice immediately and show the packing or label. Keep person warm and at rest. Do NOT induce vomiting.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

**Inhalation:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact:** Adverse symptoms may include the following:
irritation
redness

**Inhalation:** Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact:** No specific data.

**Ingestion:** No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatment:** No specific treatment

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## SECTION 5: Fire-fighting measures

**Extinguishing media**

**Suitable extinguishingmedia:** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media:** None known.

**Specific hazards arising from the chemical:** When transferring material into flammable solvents, use proper grounding to avoid electrical sparks.

**Hazardous thermal decomposition products:** Decomposition products may include the following materials: metal oxide/oxides.

**Special protective Actions for fire-fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

| | |
|---|---|
| **Special protective equipment for fire-fighters:** | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

## SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

| | |
|---|---|
| **For non-emergency personnel:** | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing dust. Put on appropriate personal protective equipment. |
| **For emergency responders:** | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel". |
| **Environmental precautions** | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |

**Methods and materials for containment and cleaning up**

| | |
|---|---|
| **Small spill:** | Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. |
| **Large spill:** | Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |
| **Reference to other sections** | See Section 1 for emergency contact information.<br>See Section 8 for information on appropriate personal protective equipment.<br>See Section 13 for additional waste treatment information. |

## SECTION 7: Handling and storage

**Precautions for safe handling**

| | |
|---|---|
| **Protective measures:** | Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. |
| **Special precautions:** | When transferring material into flammable solvents, use proper grounding to avoid electrical sparks. |
| **Advice on general occupational hygiene:** | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective |

equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**

Do not store below the following temperature: -30°C (-22°F). Store in accordance with local regulations. Store in original container protected from moisture, direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## SECTION 8: Exposure controls/personal protection

**Control parameters**

**Occupational exosure limits**

| Ingredient name | CAS | Type | mg/m³ | mppcf[a] |
|---|---|---|---|---|
| Silica, amorphous, precipitated and gel | 7631-86-9<br>112926-00-8 | OSHA PEL | 0.8 | |

According to Standard Number: 1910.1000 TABLE Z-3 Mineral Dusts
Note - Conversion factors - mppcf × 35.3 = million particles per cubic meter = particles per c.c.
[a] Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques.

**Key to abbreviations**

| | | | |
|---|---|---|---|
| A | = Acceptable Maximum Peak | S | = Potential skin absorption |
| ACGIH | = American Conference of Governmental Industrial Hygienists. | SR | = Respiratory sensitization |
| C | = Ceiling Limit | SS | = Skin sensitization |
| F | = Fume | STEL | = Short term Exposure limit values |
| IPEL | = Internal Permissible Exposure Limit | TD | = Total dust |
| OSHA | = Occupational Safety and Health Administration. | TLV | = Threshold Limit Value |
| R | = Respirable | TWA | = Time Weighted Average |
| Z | = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances | | |

**Consult local authorities for acceptable exposure limits.**

| | |
|---|---|
| **Recommended monitoring procedures:** | Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required. |
| **Appropriate engineering controls:** | Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
| **Environmental exposure controls:** | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of |

environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location

**Eye/face protection:** Safety glasses with side shields.

**Skin protection:**

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection:** Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
The respiratory protection shall be in accordance to 29 CFR 1910.134.

## SECTION 9: Physical and chemical properties

| | |
|---|---|
| Appearance: | |
| Physical state: | Solid (Powder) |
| Color: | White. |
| Odor: | Odorless. |
| Odor threshold: | Not available. |
| pH: | 5 to 9 |
| Melting point: | Not available. |
| Boiling point: | The study does not need to be conducted because the substance is a solid that melts above 300°C (572 °F). |
| Flash point: | Not applicable. Product does not sustain combustion. |
| Auto-ignition | Not applicable. |

| | |
|---|---|
| temperature: | |
| Decomposition temperature: | Not available. |
| Flammability: | substance is not flammable. |
| Lower and upper explosive (flammable) limits: | Substance is not explosive. |
| Evaporation rate: | Not applicable. |
| Vapor pressure: | Not applicable. |
| Vapor density: | Not applicable. |
| Relative density: | Not available. |
| Solubility(ies): | |

| Media | Result |
|---|---|
| cold water | Soluble |

| | |
|---|---|
| Water Solubility at room temperature: | >0.02 g/l |
| Partition coefficient: noctanol/water: | Not applicable – inorganic substance. |
| Viscosity | Not Applicable |
| Volatility | 0% (v/v), 0% (w/w) |
| % Solid. (w/w) | 100 |

## SECTION 10: Stability and reactivity

**Reactivity**

No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**

The product is stable.

**Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**

High temperature (>800 C) treatment (calcining). Avoid alteration of product properties before use. Calcining (which may result in crystalline formation) or mixing with additives may alter toxicological properties.

Refer to protective measures listed in sections 7 and 8.

**Incompatible materials**

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

**Hazardous decomposition products**

Depending on conditions, decomposition products may include the following materials: metal oxide/oxides

## SECTION 11: Toxicological information

### Information on toxicological effects

**Acute Toxicity:**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Silica, amorphous, precipitated and gel | LD50 Dermal<br>LD50 Oral | Rabbit<br>Rat | >5000 mg/kg<br>>5000 mg/kg | -<br>- |

**Conclusion/Summary:** non-toxic.

**Irritation/Corrosion:**

**Conclusion/Summary**

Skin: The substance does not meet the classification criteria.

Eyes: The substance does not meet the classification criteria..

Respiratory: The substance does not meet the classification criteria..

**Sensitization:**

**Conclusion/Summary**

Skin: The substance does not meet the classification criteria..

Respiratory: The substance does not meet the classification criteria..

**Mutagenicity:**

**Conclusion/Summary:** The substance does not meet the classification criteria..

**Carcinogenicity:**

**Conclusion/Summary:** Unclassifiable as to carcinogenicity in humans..

**Classification:**

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| Silica, amorphous, precipitated and gel | - | 3 | - |

**Carcinogen Classification code:**

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

**Reproductive Toxicity:**

**Conclusion/Summary:** The substance does not meet the classification criteria..

**Teratogenicity:**

**Conclusion/Summary:** The substance does not meet the classification criteria..

**Specific target organ toxicity (single exposure):**

Not available.

**Specific target organ toxicity (repeated exposure):**

**Target organs:** Contains material which may cause damage to the following organs: upper respiratory tract, eyes, however changes are reversible. The substance does not meet the classification criteria.

**Aspiration hazard:**

not applicable – inorganic, solid substance.

### Information on the likely routes of exposure

### Potential acute health effects

| | |
|---|---|
| Eye contact: | Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. |
| Inhalation: | Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. |
| Skin contact: | No known significant effects or critical hazards |
| Ingestion: | No known significant effects or critical hazards |

**Over-exposure signs/symptoms**

| | |
|---|---|
| Eye contact: | Adverse symptoms may include the following:<br>irritation<br>redness |
| Inhalation: | Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing |
| Skin contact: | No specific data. |
| Ingestion: | No specific data. |

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Conclusion/Summary:** Repeated exposure of the eyes to a low level of dust can produce eye irritation.
Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact

**Short term exposure**

| | |
|---|---|
| Potential immediate effects: | See section 4. |
| Potential delayed effects: | See section 4. |

**Potential chronic health effects**

| | |
|---|---|
| General: | Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed an average time span of 8.6 years. Of these 165 workers, 44 had been exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers.<br>Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposures. Laboratory studies have also been conducted in small animals via inhalation of levels of precipitated silica dust of up to 126 mg/cu.m. per periods from six months to two years. Although precipitated silica was temporarily deposited in the animals´ lungs, most of the deposited material was cleared soon after the dust exposure ended. The results of all studies performed by, or known to, Qemetica indicate a very low order of pulmonary activity for synthetic precipitated |

silicas. Qemetica recommends that persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection.

Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Reproductive Toxicity: No known significant effects or critical hazards.

## SECTION 12: Ecological information

### Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| Silica, amorphous, precipitated and gel | NOEC >1000 ppm | Daphnia - *Daphnia magna* | 24 hours |
| | Acute NOEC >10000 ppm Fresh water | Fish | 96 hours Static |
| | Acute NOEC >10000 ppm | Fish - Brachydanio rerio | 4 days Static |

### Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| Silica, amorphous, precipitated and gel | - | - | Not readily - it is an inorganic material and does not break down through biological processes like organic substances |

### Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Silica, amorphous, precipitated and gel | - | 0 | Low |

### Mobility in soil

Soil/water partition coefficient (KOC): Not available.

### Other adverse effects (such as hazardous to the ozone layer)

The substance does not contribute to ozone layer depletion.

## SECTION 13: Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

**Disposal should be in accordance with applicable regional, national and local laws and regulations.**
**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures**

## SECTION 14: Transport information

| | DOT | IMDG | IATA |
|---|---|---|---|
| **UN number** | Not regulated. | Not regulated. | Not regulated. |
| **UN proper shipping name** | - | - | - |
| **Transport hazard class (es)** | - | - | - |
| **Packing group** | - | - | - |
| **Environmental hazards** | No. | No. | No. |
| **Marine pollutant substances** | Not applicable. | Not applicable. | Not applicable. |

**Additional information:**
**DOT:** None identified.
**IMDG:** None identified.
**IATA:** None identified.

**Special precautions for user:** **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments:** Not applicable.

## SECTION 15: Regulatory information

**United States**

**United States inventory (TSCA 8b):** All components are active or exempted.

**SARA 302/304**

**SARA 304 RQ** Not applicable.

**Composition/information on ingredients:**

No products were found.

**SARA 311/312**

**Classification** Not applicable.

**Composition/information on ingredients:**

No products were found.

## SECTION 16: Other information

**Hazardous Material Information System (U.S.A.)**

**Health:** 1 **Flammability:** 0 **Physical hazards:** 0

(*) - Chronic effects

**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, thepreparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.**

**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

**National Fire Protection Association (U.S.A.)**

**Health:** 1 **Flammability:** 0 **Instability:** 0

**Date of previous issue** 18.03.2025

**Organization that prepared the SDS:** EHS

**Key to abbreviations:**
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of

Pollution From Ships, 1973 as modified by the Protocol of 1978.
("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

**Indicates information that has changed from previously issued version.**

**Disclaimer**

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Qemetica, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*