

This safety data sheet was created pursuant to the requirements of:  
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 25-Apr-2025

Revision date 06-Oct-2025

Revision Number 4

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

|                              |                            |
|------------------------------|----------------------------|
| Product Code(s)              | 48990                      |
| Safety data sheet number     | 48990                      |
| Product Name                 | AMORPHOUS SILICA           |
| Form                         | nanofom                    |
| UK REACH registration number | UK-01-2509930461-7-XXXX    |
| EC Number                    | 231-545-4                  |
| CAS No                       | 7631-86-9                  |
| Synonyms                     | SIPERNAT 25, SIPERNAT 22 S |
| Pure substance/mixture       | Substance                  |
| Molecular weight             | 60.074                     |

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

|                 |                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------|
| Recommended use | Industrial use<br>Desiccant<br>Coatings<br>Filler<br>Ink and toners<br>Absorbent<br>Cosmetics |
|-----------------|-----------------------------------------------------------------------------------------------|

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

Univar Solutions UK Ltd  
Aquarius House  
6 Mid Point Business Park  
Bradford  
GBR

For further information, please contact

|                                |                                   |
|--------------------------------|-----------------------------------|
| E-mail address                 | SDS.EMEA@univarsolutions.com      |
| Non-Emergency Telephone Number | +44 1274 267300 / +44 1274 267306 |

### 1.4. Emergency telephone number

Emergency Telephone

SGS - +32 (0)3 575 55 55 (24h)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

Not classified

**2.2. Label elements**

Not classified

**Hazard statements**

Not classified

EUH210 - Safety data sheet available on request

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

| Chemical name                 | Weight-% | EC No (EU Index No) | UK REACH registration number | Classification according to GB CLP (SI 2020/1567 as amended) | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|-------------------------------|----------|---------------------|------------------------------|--------------------------------------------------------------|------------------------------------|----------|----------------------|
| AMORPHOUS SILICA<br>7631-86-9 | 99-100%  | 231-545-4           | UK-01-2509930461-7-XXXX      | Not classified                                               | -                                  | -        | -                    |

**Full text of H- and EUH-phrases: see section 16**This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (UK REACH Article 59)**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.

**Skin contact**

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur.

**Ingestion** Rinse mouth thoroughly with water. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.

#### **4.2. Most important symptoms and effects, both acute and delayed**

**Eyes** Solid particles trapped behind the eyelid may cause abrasive damage,.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

**Note to doctors** Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

#### **5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** When heated and in case of fire, toxic vapours/gases may be formed.

**Hazardous combustion products** Carbon oxides.

#### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Provide adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Avoid breathing dust.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

#### **6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Avoid generation of dust. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

**Advice on safe handling** Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Do not breathe dust. Avoid generation of dust. Take precautionary measures against static discharge. Not flammable.

**General hygiene considerations** Do not eat, drink or smoke when using the product. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Take precautionary measures against static discharge. Hygroscopic.

### 7.3. Specific end use(s)

**Specific use(s)**  
See section 1 for more information.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### **Exposure Limits**

| Chemical name                 | United Kingdom                                                                                                      |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|
| AMORPHOUS SILICA<br>7631-86-9 | TWA: 6 mg/m <sup>3</sup><br>TWA: 2.4 mg/m <sup>3</sup><br>STEL: 18 mg/m <sup>3</sup><br>STEL: 7.2 mg/m <sup>3</sup> |

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### **Derived No Effect Level (DNEL) - Workers**

| Chemical name                 | Oral | Dermal | Inhalation                  |
|-------------------------------|------|--------|-----------------------------|
| AMORPHOUS SILICA<br>7631-86-9 |      |        | 4 mg/m <sup>3</sup> [5] [6] |

[5] Local health effects.

[6] Long term.

**Derived No Effect Level (DNEL) - General Public** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

## 8.2. Exposure controls

**Engineering controls** Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

**Hand protection** Wear suitable gloves. Gloves must conform to standard EN 374.

| Gloves              |                      |                 |                    |
|---------------------|----------------------|-----------------|--------------------|
| Duration of contact | PPE - Glove material | Glove thickness | Break through time |
|                     | Nitrile rubber       | $\geq 0.11$ mm  | $\geq 480$ minutes |
|                     | Butyl rubber         |                 |                    |

**Skin and body protection** Wear appropriate clothing to prevent reasonably probable skin contact.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Recommended filter type:** Particulate filter, type P2.

**General hygiene considerations** Do not eat, drink or smoke when using the product. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Physical state** Solid  
**Appearance** Powder Dusty powder Crystalline powder  
**Colour** white  
**Odour** Characteristic.  
**Odour threshold** Not applicable

| Property                                       | Values      | Remarks • Method                             |
|------------------------------------------------|-------------|----------------------------------------------|
| <b>Melting point / freezing point</b>          | $> 1700$ °C |                                              |
| <b>Initial boiling point and boiling range</b> | $> 1700$ °C |                                              |
| <b>Flammability</b>                            |             | The product is not flammable.                |
| <b>Flammability Limit in Air</b>               |             | Not applicable.                              |
| Upper flammability or explosive limits         |             |                                              |
| Lower flammability or explosive limits         |             |                                              |
| <b>Flash point</b>                             |             | Not determined.                              |
| <b>Autoignition temperature</b>                |             | Not applicable. Product is not selfigniting. |
| <b>Decomposition temperature</b>               |             | No information available.                    |
| <b>pH</b>                                      | 2.0 - 9.0   | @ 20 °C.                                     |
| pH (as aqueous solution)                       |             | No information available.                    |
| <b>Kinematic viscosity</b>                     |             | Not applicable.                              |
| Dynamic viscosity                              |             | Not applicable.                              |

|                               |                                 |                           |
|-------------------------------|---------------------------------|---------------------------|
| Water solubility              | slightly soluble<br>≥100mg/l    | @ 20 °C. OECD 105.        |
| Solubility(ies)               |                                 | No information available. |
| Partition coefficient         |                                 | Not determined.           |
| Vapour pressure               |                                 | Not applicable.           |
| Relative density              | 1.9 - 2.20                      | @ 20 °C.                  |
| Bulk density                  | 70 - 600 kg/m <sup>3</sup>      |                           |
| Liquid Density                | No information available        | No information available  |
| Relative vapour density       |                                 | Not applicable.           |
| Particle characteristics      |                                 | No information available. |
| Particle Size                 | No information available        |                           |
| Particle Size Distribution    | No information available        |                           |
| Explosive properties          | Not considered to be explosive. |                           |
| Oxidising properties          | Not applicable                  |                           |
| <b>9.2. Other information</b> |                                 |                           |
| Molecular weight              | 60.074                          |                           |
| Evaporation rate              | Not applicable                  |                           |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity Stable under recommended storage conditions. Hygroscopic.

### 10.2. Chemical stability

Stability Stable under normal conditions.

#### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid Take precautionary measures against static discharges.

### 10.5. Incompatible materials

Incompatible materials None known based on information supplied.

### 10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Information on likely routes of exposure

##### Product Information

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

**Eye contact** Solid particles trapped behind the eyelid may cause abrasive damage,.

**Skin contact** Dust or powder may irritate the skin.

**Ingestion** May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms**

**Acute toxicity**

**Numerical measures of toxicity**

**Component Information**

| Chemical name    | Oral LD50            | Dermal LD50             | Inhalation LC50         |
|------------------|----------------------|-------------------------|-------------------------|
| AMORPHOUS SILICA | > 5000 mg/kg ( Rat ) | > 5000 mg/kg ( Rabbit ) | > 58.8 mg/L ( Rat ) 4 h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

**AMORPHOUS SILICA (7631-86-9)**

| Method   | Species | Exposure route | Effective dose | Exposure time | Results      |
|----------|---------|----------------|----------------|---------------|--------------|
| OECD 404 | Rabbit  | Dermal         |                |               | non-irritant |

**Serious eye damage/eye irritation** Based on available data the classification criteria are not met.

**AMORPHOUS SILICA (7631-86-9)**

| Method   | Species | Exposure route | Effective dose | Exposure time | Results      |
|----------|---------|----------------|----------------|---------------|--------------|
| OECD 405 | Rabbit  | eye            |                |               | non-irritant |

**Respiratory or skin sensitisation** Based on available data the classification criteria are not met.

**Germ cell mutagenicity** Based on available data the classification criteria are not met.

**Component Information**

**AMORPHOUS SILICA (7631-86-9)**

| Method   | Species  | Results  |
|----------|----------|----------|
| OECD 471 | in vitro | Negative |

**Carcinogenicity** Based on available data the classification criteria are not met.

**Reproductive toxicity** Based on available data the classification criteria are not met.

**STOT - single exposure** Based on available data the classification criteria are not met.

**STOT - repeated exposure** Based on available data the classification criteria are not met.

**Aspiration hazard** Based on available data the classification criteria are not met.

**Other adverse effects** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

AMORPHOUS SILICA (7631-86-9)

| Method                                                                        | Species                 | Endpoint type | Effective dose | Exposure time | Results |
|-------------------------------------------------------------------------------|-------------------------|---------------|----------------|---------------|---------|
| OECD Test No. 203: Fish, Acute Toxicity Test                                  | Brachydanio rerio       | LC0           | 10000 mg/L     | 96 hours      |         |
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test                     | Daphnia magna           | EC50          | > 1000 mg/L    | 24 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test | Scenedesmus subspicatus | EC50          | > 10000 mg/L   | 72 hours      |         |

### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

### 12.3. Bioaccumulative potential

**Bioaccumulation** MATERIAL DOES NOT BIOACCUMULATE.

### 12.4. Mobility in soil

**Mobility in soil** No information available.

### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

| Chemical name    | PBT and vPvB assessment         |
|------------------|---------------------------------|
| AMORPHOUS SILICA | The substance is not PBT / vPvB |

### 12.6. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste from residues/unused** Waste to be treated as controlled waste. Disposal to licensed waste disposal site in



products accordance with local Waste Disposal Authority.

Contaminated packaging Do not reuse empty containers.

## SECTION 14: Transport information

### IATA

|                                   |               |
|-----------------------------------|---------------|
| 14.1 UN number or ID number       | Not regulated |
| 14.2 UN proper shipping name      | Not regulated |
| 14.3 Transport hazard class(es)   | Not regulated |
| 14.4 Packing group                | Not regulated |
| 14.5 Environmental hazards        | No            |
| 14.6 Special precautions for user |               |
| Special Provisions                | None          |

### IMDG

|                                                              |                          |
|--------------------------------------------------------------|--------------------------|
| 14.1 UN number or ID number                                  | Not regulated            |
| 14.2 UN proper shipping name                                 | Not regulated            |
| 14.3 Transport hazard class(es)                              | Not regulated            |
| 14.4 Packing group                                           | Not regulated            |
| 14.5 Environmental hazards                                   | No                       |
| 14.6 Special precautions for user                            |                          |
| Special Provisions                                           | None                     |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

### RID

|                                   |               |
|-----------------------------------|---------------|
| 14.1 UN number or ID number       | Not regulated |
| 14.2 UN proper shipping name      | Not regulated |
| 14.3 Transport hazard class(es)   | Not regulated |
| 14.4 Packing group                | Not regulated |
| 14.5 Environmental hazards        | No            |
| 14.6 Special precautions for user |               |
| Special Provisions                | None          |

### ADR

|                                   |               |
|-----------------------------------|---------------|
| 14.1 UN number or ID number       | Not regulated |
| 14.2 UN proper shipping name      | Not regulated |
| 14.3 Transport hazard class(es)   | Not regulated |
| 14.4 Packing group                | Not regulated |
| 14.5 Environmental hazards        | No            |
| 14.6 Special precautions for user |               |
| Special Provisions                | None          |

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

#### **Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

This product does not contain substances subject to restriction (UK REACH - Annex XVII).

#### **Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

Not applicable

**Named dangerous substances per COMAH Regulations 2015 (as amended)**

Not applicable

**The Ozone-Depleting Substances Regulations 2015**

Not applicable

**The Biocidal Products Regulations 2001 (as amended)**

Not applicable

**The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)**

Not applicable

**Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)**

Not applicable

**International Inventories**

|                      |                                                  |
|----------------------|--------------------------------------------------|
| <b>TSCA</b>          | Contact supplier for inventory compliance status |
| <b>DSL/NDSL</b>      | Contact supplier for inventory compliance status |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status |
| <b>ENCS</b>          | Contact supplier for inventory compliance status |
| <b>IECSC</b>         | Contact supplier for inventory compliance status |
| <b>KECI</b>          | Contact supplier for inventory compliance status |
| <b>PICCS</b>         | Contact supplier for inventory compliance status |
| <b>AIIC</b>          | Contact supplier for inventory compliance status |
| <b>NZIoC</b>         | Contact supplier for inventory compliance status |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

**15.2. Chemical safety assessment****Chemical Safety Report**

A Chemical Safety Assessment has been carried out for this substance

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend Section 8: Exposure controls/personal protection**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |
| +       | Sensitisers                 |      |                                  |

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**Classification procedure**

|                                                                 |                    |
|-----------------------------------------------------------------|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity                                             | Calculation method |
| Acute dermal toxicity                                           | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - vapour                              | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitisation                                       | Calculation method |
| Skin sensitisation                                              | Calculation method |
| Mutagenicity                                                    | Calculation method |
| Carcinogenicity                                                 | Calculation method |
| Reproductive toxicity                                           | Calculation method |
| STOT - single exposure                                          | Calculation method |
| STOT - repeated exposure                                        | Calculation method |
| Acute aquatic toxicity                                          | Calculation method |
| Chronic aquatic toxicity                                        | Calculation method |
| Aspiration hazard                                               | Calculation method |
| Ozone                                                           | Calculation method |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Prepared By** Lisa Bland

**Supersedes date** 25-Apr-2025

**Revision date** 06-Oct-2025

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)**  
**Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet