

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

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

1.1. Product identifier

Product name: Symbio Silicon

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

1.3. Details of the supplier of the safety data sheet

Company name:

Origin Amenity Solutions Ltd

1-3 Freeman Court,

Jarman Way,

Orchard Road,

Royston,

Hertfordshire,

SG8 5HW

Tel: 0800 138 7222

Email: sales.symbio@originamenity.com

1.4. Emergency telephone number

Emergency phone No. 0800 138 7222 (09.00 – 17.00 GMT Monday – Friday)

National emergency telephone number 111

2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 1 H318

Specific target organ toxicity — Single exposure, Category 3, H335

Respiratory tract irritation

Full text of H statements : see section 16

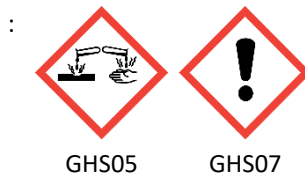
Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. Causes serious eye damage.

2.2. Label Elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Contains

: Potassium Silicate

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

- Hazard statements (CLP) : H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
- Precautionary statements (CLP) : P261 - Avoid breathing mist, spray.
P280 - Wear protective gloves, eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards

No additional information

3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

POTASSIUM SILICATE

Product Identifier	CLP Classification	Percent
CAS no: 1312-76-1	Skin Irrit. 2: H315	≥50% - <60%
EC-No: 215-199-1	Eye Dam 1: H318	
REACH: 01-2119456888-17	STOT SE 3: H335	

Full text of H-statements: See section 16

4: First aid measures

4.1. Description of first aid measures

- First-aid measures general** : Call a poison center or a doctor if you feel unwell.
- First-aid measures after inhalation** : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- First-aid measures after skin contact** : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion** : Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects after inhalation** : May cause respiratory irritation.
- Symptoms/effects after skin contact** : Irritation.
- Symptoms/effects after eye contact** : Serious damage to eyes.

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

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

Treat symptomatically

Immediate / special treatment: Eye bathing equipment should be available on the premises.

5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Ventilate spillage area. Avoid breathing fumes. Avoid contact with skin and eyes. Do not attempt to take to action without suitable protective equipment. Refer to section 8.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS for personal protection and section 13 of SDS for waste disposal.

7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Avoid breathing mist, vapours or spray. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Slightly hazy.
Colour	: Colourless.
Odour	: odourless.

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

Odour threshold	: -
pH	: 10.6
pH solution	: 1 %
Relative evaporation rate (butylacetate=1)	: -
Melting point	: -
Freezing point	: -
Boiling point	: ≥ 100 °C
Flash point	: Not flammable
Auto-ignition temperature	: -
Decomposition temperature	: -
Flammability (solid, gas)	: Not applicable
Vapour pressure	: -
Relative vapour density at 20 °C	: -
Relative density	: -
Density	: 1.36 g/ml
Solubility	: completely miscible.
Partition coefficient n-octanol/water (Log Pow)	: -
Viscosity, kinematic	: -
Viscosity, dynamic	: -
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.
Explosive Limits	: -

9.2. Other information

Other information: No additional information available.

10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended use, transport and storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: None under recommended storage and handling conditions

10.5. Incompatible materials

Materials to avoid: No additional information available

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
 Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Not classified

Potassium Silicate (1312-76-1)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2.06 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)

Skin corrosion/irritation : Causes skin irritation.
 pH: 10.6
 Serious eye damage/irritation : Causes serious eye damage.
 pH: 10.6
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 Reproductive toxicity : Not classified

Potassium Silicate (1312-76-1)

NOAEL (animal/female, F0/P)	> 159 mg/kg bodyweight Animal: rat, Animal sex: female
-----------------------------	--

STOT-single exposure : May cause respiratory irritation.

Potassium Silicate (1312-76-1)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

STOT-repeated exposure : Not classified

Potassium Silicate (1312-76-1)

LOAEL (oral, rat, 90 days)	716 – 892 mg/kg bodyweight Animal: mouse
----------------------------	--

Aspiration hazard : Not classified

Prosilicon

Viscosity, kinematic	-
----------------------	---

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Potassium Silicate (1312-76-1)

EC50 72h - Algae [1]	207 mg/l Test organisms (species): <i>Desmodesmus subspicatus</i> (previous name: <i>Scenedesmus subspicatus</i>)
----------------------	--

12.2. Persistence and degradability

No additional information

12.3. Bioaccumulative potential

No bioaccumulation potential.

Prosilicon

Partition coefficient n-octanol/water (Log Pow)	-
---	---

12.4. Mobility in soil

No additional information

12.5. Results of PBT and vPvB assessment

This product is not identified as a PBT/ vPvB substance.

12.6. Other adverse effects

No additional information

13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company. **NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14: Transport information

Transport class: This product does not require a classification for transport.

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

16: Other information

16.1 Other information

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

Abbreviations and acronyms	
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

SAFETY DATA SHEET

SYMBIO SILICON

SDS COMPLETED 8TH MARCH 2021

VERSION 02

Disclaimer

The information in this SDS was obtained from sources which we believe to be reliable. Origin Amenity Solutions provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate handling of the product by properly trained and qualified personnel. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Origin Amenity Solutions makes no warranties or guarantees either express or implied with respect to the information contained herein. The conditions or methods of handling, storage, use or disposal of the product are beyond our control, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product