

REVISION 01 SEPTEMBER 2022
SDS COMPLETED 3RD OCTOBER 2019

VERSION 03
REVISION NUMBER: NA

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

1.1 Product Name:

Symbio Mycorrhizal Transplanter

1.2 Relevant identified uses and uses advised against:

A preparation to improve mycorrhizal fungi colonisation of plant roots. Not for oral consumption or direct contact with food or beverages

1.3 Details of Supplier of 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 phone 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 mixture:

Physical and Chemical Hazards: Not classified.

Human health: Not classified.

Environment: Not classified.

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements:

Pictogram none

Signal Word: none

Hazard Statement(s): none

EUH 208: Contains micro-organisms. Micro-organisms may have the potential to provoke sensitising reactions

2.3 Other hazards

The mixture does not fulfil the criteria for PBT or vPvB substance

The bacteria and fungi in this mixture are considered to belong to hazard group 1 as defined by the Advisory Committee on Dangerous Pathogens (ACDP) as “a biological agent unlikely to cause human disease”. It should NOT be assumed. However, that this organism will be innocuous in all situations or that infections can never occur. The mixture should therefore not be used by, or in the presence of immunocompromised persons.

3. Composition/Information on ingredients

A mixture containing beneficial soil microorganisms on a clinoptilolite base.

The microorganisms in this mixture are considered to belong to hazard group 1 as defined by the Advisory Committee on Dangerous Pathogens (ACDP) as “a biological agent unlikely to cause human disease”. It should NOT be assumed however, that this organism will be innocuous in all situations or that infections can never occur. The mixture should therefore not be used by, or in the presence of, immunocompromised persons.

Crystalline silica inhaled in the form of quartz is carcinogenic to humans (Group 1). This product contains less than 0.1% respirable crystalline silica, well below exposure limits, and under normal conditions of use and storage, is not expected to cause cancer.

Name	CAS no.	Concentration (w/w %)	PBT / WEL	CLP Classification
Clinoptilolite	12173-10-3	70-80%	Substances with community workplace exposure limits	Not classified
Silica Hydrated	7631-86-9	20-30%		Not classified
Quartz (Respirable <0.1%)	14808-60-7	0-0.5%		Not classified

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures:

Inhalation	Remove to fresh air and keep at rest. Get medical attention if any discomfort continues.
Ingestion	Rinse out mouth with water and seek medical advice.
Skin contact	Wash hands and exposed skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 10 minutes. Get medical attention if symptoms persist.

4.2 Most important symptoms and effects,

Skin contact:	There may be mild irritation at the site of contact.
Eye contact:	There may be irritation and redness.
Ingestion:	Excessive ingestion may cause feelings of nausea.
Inhalation:	Not anticipated under normal conditions of use.

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

Notes for the doctor Treat symptomatically.

5. Fire Fighting Measures

5.1 Extinguishing media:

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media Not applicable.

5.2 Special hazards arising from the mixture:

None known

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5.3 Advice for fire fighters:

Firefighters should be equipped with breathing apparatus appropriate to environmental conditions and wear protective clothing.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid airborne dust generation, do not breathe dust. Ensure adequate ventilation Avoid contact with eyes and skin Wash hands thoroughly after handling
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6.2 Environmental Precautions:

No special precautions

6.3 Methods and material for containment and cleaning up:

Methods for cleaning up	Avoid creating dust, preferably vacuum clean and collect in suitable labelled containers for waste. Rinse the contaminated area with plenty of water
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6.4 Reference to other sections:

Personal protective means are given in section 8. Disposal advice is given in section 13.

7. Handling and Storage

7.1 Precautions for safe handling:

Read the label before use. Avoid dust formation, do not breathe dust. Provide appropriate exhaust ventilation at Read label before use.
Avoid inhalation of dust and contact with skin and eyes.
Wear appropriate clothing to prevent repeated or prolonged skin contact.
Wash hands thoroughly after handling.
Do not smoke, eat or drink when handling product.
Handle packaged products carefully to prevent accidental bursting.
Remove contaminated clothing and protective equipment before entering eating areas

7.2 Conditions for safe storage, including any incompatibilities:

Store in original containers in a cool dry place.

7.3 Specific End Use:

The mixture is designed to be added direct plant roots or to fertilisers or biostimulants to enhance plant growth prior to use. See label for specific instructions

8. Exposure Controls

8.1 Control Parameters:

Ingredients with limits that require monitoring

Name	Product Identifier	Limit value – 8 hours TWA (UK) ¹
Silica Hydrated (Amorphous Opaline Silica)	CAS no: 7631-86-9	6 mg/m ³ (inhalable aerosol) 2.4 mg/m ³ (respirable aerosol)
Quartz (Respirable <0.1%)	CAS no: 14808-60-7	0.1 mg/m ³ (respirable aerosol)
Clinoptilolite (dust)	CAS no: 12173-10-3	10 mg/m ³ (inhalable dust) 4 mg/m ³ (respirable dust)

¹For equivalent limits in other countries, please consult the local regulatory authority

Potassium nitrate (CAS: 7757-79-1)

DNEL	Workers - Dermal; Long term systemic effects: 20.8 mg/kg/day General Population - Dermal; long term systemic effects: 12.5 mg/kg/day Workers - Inhalation; Long term systemic effects: 36.7 mg/m ³ General Population - Inhalation; long term systemic effects: 10.9 mg/m ³
PNEC	- Fresh water; 0.045 mg/l - Marine water; 0.045 mg/l

8.2 Exposure controls:

Engineering Measures For normal use apply outdoors or in a well ventilated area. Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

Respiratory Equipment None required for normal use. In case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation.

Hand Protection For prolonged or repeated skin contact use suitable protective gloves. PVC or rubber gloves are recommended.

Eye Protection Use eye protection if required to prevent eye contact. Goggles/face shield are recommended.

Hygiene Measures When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Skin Protection No specific requirement. Appropriate protection (e.g. protective clothing, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin.

9. Physical and Chemical Properties

9.1 On basic physical and chemical properties

- | | |
|----------------------------------|---------------------------|
| a) Appearance: | light brown/orange powder |
| b) Odour: | Slight earth-like odour |
| c) Odour threshold: | not determined |
| d) pH: | 7.0-8.0 |
| e) melting point/freezing point: | not applicable |
| f) boiling point: | not determined |

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| g) flash point: | not applicable |
| h) evaporation rate: | not applicable |
| i) flammability: | not determined |
| j) explosive limits: | not applicable |
| k) vapour pressure: | not applicable |
| l) vapour density: | not applicable |
| m) relative density: | not determined |
| n) solubility in water: | insoluble |
| o) partition coefficient: | not determined |
| p) auto ignition temperature: | not determined |
| q) decomposition temperature: | not determined |
| r) viscosity: | not applicable |
| s) explosive properties: | not determined |
| t) oxidising properties: | not determined |

9.2 Other Information:

No further information

10. Stability and Reactivity

10.1 Reactivity:

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

10.2 Chemical stability:

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions:

None known

10.4 Conditions to avoid:

None known

10.5 Incompatible Materials:

Strong Oxidising Agents, Hydrofluoric Acid.

Avoid contact with moisture as product may become microbially active and deteriorate.

10.6 Hazardous decomposition products

None known

11. Toxicological Information

11.1 Information on toxicological effects Mixture:

- | | |
|-----------------------------------|--|
| Notes (oral LD50) | No specific test data are available. |
| Notes (dermal LD50) | No specific test data are available. |
| Notes (inhalation LC50) | No specific test data are available. Excessive inhalation of respirable particles (up to 10 micron) over an extended period may result in silicosis of the lung. |
| Irritation of eyes | From dusty gritty material. |
| Respiratory sensitisation: | No specific test data are available. |

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Skin sensitization	Not determined.
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Carcinogenicity	No specific test data are available.
Reproductive toxicity – fertility	Does not contain any substances known to be toxic to reproduction.
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

12. Ecological Information

Ecotoxicity

This product is classified as environmentally non-hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1 Toxicity:

Acute Toxicity – Fish: No data.
Acute Toxicity – Aquatic Invertebrates: No data
Acute Toxicity – Aquatic Plants: No data

12.2 Persistence and degradability

The mycorrhizal fungi are naturally present in the environment.

12.3 Bioaccumulative potential

Not expected to accumulate

12.4 Mobility in soil

Not determined

12.5 Result of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6 Other adverse effects:

Not determined

13. Disposal Considerations

13.1 Waste treatment methods Product:

Disposal methods	Reuse or recycle products wherever possible. No specific disposal method required.
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14. Transport Information

Not classified for transport

15. Regulatory Information

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

REACH – Exempted in accordance with Annex V.7
Workplace Exposure Limits 2005 (EH40)

15.2 Chemical Safety Assessment

No data available

16. Other Information

Revisions: Slight change in formulation – this version supersedes all previous versions
Section 3: Listing of hazardous material

Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
WEL	Work Place Exposure Limit
TWA	Time Weighted Average
PBT	Persistent Bioaccumulative and Toxic
vPvB	Very Persistent and Very Bioaccumulative

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.

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