

SDS COMPLETED 14TH SEPTEMBER 2022

VERSION 01
REVISION NUMBER:

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

1.1 Product Name:

Symbio Granular Endo Mycorrhizae

1.2 Relevant identified uses and uses advised against:

Beneficial endomycorrhizal propagules on an expanded clay carrier beneficial for plant growth

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:

Chemical characterization: Mixture

Description: Mixture of substances

According to Regulation (EC) No 1272/2008: not classed as hazardous

2.2 Label elements:

None required

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

2.3 Other hazards

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

The mycorrhizal 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.

Mixture may form dust in the air

3. Composition/Information on ingredients

A mixture containing mycorrhizal fungal species on a silica base.

The mycorrhizal 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.

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	Product Identifier	Concentration (w/w %)
Silica Hydrated (Amorphous Opaline Silica)	CAS no: 7631-86-9	90-99%
Quartz (Respirable <0.1%)	CAS no: 14808-60-7	0-5%

4. First Aid Measures

4.1 Description of first aid measures:

Eye: Immediately flush eyes with cool running water, lifting upper and lower lids. If irritation persists or for foreign body in the eye, get immediate medical attention.

Skin: None needed for normal use.

Ingestion: If used material is ingested, get medical attention due to possibility of chemical contamination. If large amount of unused material is swallowed, get immediate medical attention.

Inhalation: Remove to fresh air.

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

Follow advice in 4.1

5. Fire Fighting Measures

5.1 Extinguishing media:

Suitable extinguishing media: any extinguishing media may be used but should be appropriate to the cause of the fire and surrounding area.

Unsuitable extinguishing media: None known

5.2 Special hazards arising from the mixture:

None known.

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

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6.1.1 non emergency personnel

Avoid airborne dust formation, ensure adequate ventilation, do not breathe dust. Wear respiratory personal protective equipment in accordance with national legislation. Wear suitable protective clothing (overalls), gloves and safety glasses.

6.1.2 emergency personnel

see 6.1.1

6.2 Environmental Precautions:

No special precautions
Sweep up and collect for proper disposal

6.3 Methods and material for containment and cleaning up:

6.3.1 containment:

no special precautions

6.3.2 clean-up:

Avoid creating dust, preferably vacuum clean and collect in suitable labelled containers for waste. Rinse the contaminated area with plenty of water

6.3.3 other information relating to spills and releases:

not applicable

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 airborne dust formation, ensure adequate ventilation, do not breathe dust. For operations where air-borne dust is formed use process enclosures, local exhaust ventilation or other engineering controls to keep airborne dust levels low. Other suitable controls may include respiratory protective equipment. Wash hands after working with product. Do not smoke, eat or drink when handling product. Employees should wear protective work clothing, shoes, gloves and safety glasses.

7.2 Conditions for safe storage, including any incompatibilities:

Store in original containers in a cool, dry, well-ventilated area. Protect from light, raised temperatures and high humidity. Keep container tightly sealed.

7.3 Specific End Use:

The mixture is designed to be added 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)

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

8.2 Exposure controls:

Minimise airborne dust generation. Good ventilation is adequate for normal use. For operations where exposure limit may be exceeded use process enclosures, local exhaust ventilation or other engineering controls to keep airborne dust levels low. Other suitable controls may include respiratory protective equipment.

8.2.1 Appropriate Engineering Controls:

Work in a well-ventilated area. For operations where exposure limit may be exceeded use process enclosures, local exhaust ventilation or other engineering controls to keep airborne dust levels low. Other suitable controls may include respiratory protective equipment.

Avoid eating drinking and smoking. Wash hands after use.

8.2.2 Individual Protection Measures, such as personal protective equipment:

General protective and hygiene measures:

Do not breathe dust

Avoid contact with eyes and skin

Do not eat or drink while working

Take note of work place exposure limits

- a) Eye/face protection. Safety glasses
- b) Skin protection
 - Hand protection – protective gloves
 - Other – protective clothing (overalls), and shoes
- c) Respiratory protection – In case of prolonged exposure to airborne dust concentrations wear a suitable, approved respiratory protective device that complies with requirements of European and national legislation.
- d) Thermal hazards – not applicable

8.2.3 Environmental exposure controls

Avoid wind dispersal

9. Physical and Chemical Properties

9.1 basic physical and chemical properties

- a) Appearance: brown granule
- b) Odour: slight ammonia
- c) Odour threshold: not known
- d) pH: 7.0 @ 10% dispersion in water
- e) melting point/freezing point: Decomposes >400 F
- f) boiling point: not determined
- g) flash point: not determined
- h) evaporation rate: not applicable

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

9.2 Other Information:

No further relevant information

10. Stability and Reactivity

10.1 Reactivity:

No further relevant information

10.2 Chemical stability:

Stable under normal conditions

10.3 Possibility of hazardous reactions:

None known

10.4 Conditions to avoid:

Do not expose the mixture to humidity and raised temperature

10.5 Incompatible Materials:

Turpentine, hydrofluoric acid, vegetable oil, fish oil, unsaturated organic compounds
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:

- a) Acute toxicity – not classified - no data available
- b) Irritation – Classification criteria not met
- c) Corrosivity – not classified
- d) Sensitisation – Classification criteria not met
- e) Repeated dose toxicity – not classified - no data available
- f) Carcinogenicity – Classification criteria not met
- g) Mutagenicity – not classified – no data available
- h) Toxicity for reproduction – not classified - no data available

Information on likely routes of exposure:

Inhalation: No known hazard (dust irritation)

Skin: No known hazard

Eyes: No known hazard (dust irritation)

Ingestion: unlikely to be harmful if swallowed

Additional toxicological information:

This product may form dust.

Inhalation of excessive dust may cause mechanical irritation of mucous membranes and respiratory tract.

Prolonged exposure may cause symptoms of respiratory sensitisation in susceptible persons.

This product contains crystalline silica.

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.

The mycorrhizal 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.

If information is not listed in section 11 it is due to non-availability of data or not appropriate.

12. Ecological Information

12.1 Toxicity:

None known

12.2 Persistence and degradability

The mycorrhizal fungi are naturally present in the environment.

Amorphous opaline silica and silica are non-degradable

12.3 Bioaccumulative potential

Not expected to bioaccumulate

12.4 Mobility in soil

No further relevant information

12.5 Result of PBT and vPvB assessment

Not classified as PBT or vPvB substance

12.6 Other adverse effects:

No further relevant information

13. Disposal Considerations

SAFETY DATA SHEET
SYMBIO GRANULAR ENDO MYCORRHIZAE

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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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Legend to abbreviations used:

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bio-accumulative

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.