



SAFETY DATA SHEET
SYMBIO MYCORRHIZAL SEEDCOAT

SDS COMPLETED 8TH JUNE 2015

VERSION 01
REVISION NUMBER: N/A

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

1.1 Product Name:

Symbio Mycorrhizal SeedCoat

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:

Eco Solutions (C&R) Ltd T/a Symbio
Unit 8
Coopers Place
Combe Lane
Wormley
Surrey
GU8 5SZ

Tel: +44 (0) 1428 685762

Fax: +44 (0)1428 685702

Email: info@symbio.co.uk

1.1.1 Emergency phone number

Emergency telephone numbers +44 (0)1428 685762

2. Hazards Identification

2.1 Classification of the mixture:

Classification (EC 1272/2008)

Physical and Chemical Hazards: Not classified.

Human health: Not classified.

Environment: Not classified.

Classification (67/548/EEC): Not classified.

Human health

This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EEC. Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable crystalline silica dust (particles up to 10 microns in size) may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.

Environment

The product is not expected to be hazardous to the environment.

Physical and Chemical Hazards

This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH. This product should be handled with care to avoid dust generation.

2.2 Label elements:

None

Signal Word: none

Hazard Statement(s):

None



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Precautionary statement(s) (prevention):

P261: avoid breathing dust

P285: in case of inadequate ventilation, wear respiratory protection

Precautionary statement(s) (response):

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311: If experiencing respiratory symptoms call a doctor/physician.

Precautionary statement(s) (disposal):

P501: Dispose of contents/container in accordance with local regulations

2.3 Other hazards

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

The 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 mycorrhizal fungi, trichoderma sp. and bacillus sp. microbes conforming to EC EFB Class 1 (common saprophytic micro organisms - never shown to be a causal agent in human illness) on a natural crystalline mineral.

Classification (EC 1272/2008): Not classified.

Classification (67/548/EEC): Not classified.

4. FIRST AID MEASURES

4.1 Description of first aid measures:

Following aspiration/inhalation: Move affected person to fresh air, keep person quiet and warm, in case of respiratory failure administer artificial respiration, seek medical attention.

Following skin contact: Wash skin with soap and water. Use suitable lotion to moisturise skin.

Following eye contact: Remove contact lenses, if present and easy to do. Rinse eyes with water for at least 15 minutes while holding eyelids apart.

After ingestion: Rinse mouth with water, drink plenty of water. Do not induce vomiting.

Inhalation Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

Skin contact Wash skin with soap and water. Use suitable lotion to moisturise skin.

4.2 Most important symptoms and effects,

Both acute and delayed: Sensitive individuals may experience breathing difficulties

4.3 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: not applicable



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5.2 Special hazards arising from the mixture:

Low degree of risk due to thermal decomposition.

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

Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation.

6.1.1 non emergency personnel

Avoid contact with eyes and skin and dust formation, do not breathe dust. Wear suitable protective clothing (overalls) and gloves.

6.1.2 emergency personnel

see 6.1.1

6.2 Environmental Precautions:

No special precautions

6.3 Methods and material for containment and cleaning up:

Scoop up spillages and place in a container. Avoid creating dusts. Wear appropriate respiratory protection, safety glasses and overalls as a precaution. When used to absorb a hazardous substance, handle as per that substance.

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 dust formation, do not breathe dust. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable 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 and gloves. Handle packaged products carefully to prevent accidental bursting; remove contaminated clothing and protective equipment before entering eating areas.



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7.2 Conditions for safe storage, including any incompatibilities:

Store in original containers in a cool dry place. Prolonged storage should be in a fridge or deep freeze. Protect from light, raised temperatures and humidity.

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:

Workplace Exposure Limits: Respirable Dust = 4 mg/m³; Total Inhalable Dust = 10mg/m³ Quartz: Workplace Exposure Limit = 0.1 mg/m³

8.2 Exposure controls:

Engineering Measures 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 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. 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.

8.2.1 Appropriate Engineering Controls:

Work in a well ventilated area. Avoid eating drinking and smoking. Wash hands after use.

8.2.2 Individual Protection Measures, such as personal protective equipment:

- a) Eye/face protection. Safety glasses
- b) Skin protection
 - Hand protection – rubber gloves
 - Other – protective clothing (overalls), and shoes
- c) Respiratory protection – dust mask
- d) Thermal hazards – not applicable

8.2.3 Environmental exposure controls

Not applicable

9. Physical and Chemical Properties

9.1 On basic physical and chemical properties

- a) Appearance: light brown/orange powder



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- b) Odour: Slight earth-like odour
- c) Odour threshold: not known
- d) pH: 7.0-8.0
- e) melting point/freezing point: Approx. 1300°C
- f) boiling point: not applicable
- g) flash point: not applicable
- h) evaporation rate: not applicable
- i) flammability: Non-flammable
- j) explosive limits: not applicable
- k) vapour pressure: not applicable
- l) vapour density: not applicable
- m) relative density: 0.7-0.8 g/cm³
- 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 applicable
- t) oxidising properties: not applicable

9.2 Other Information:

Explosive properties: not classified as explosive
Storage temperature: 0-30°C

10. Stability and Reactivity

10.1 Reactivity:

Beware of following conditions: avoid mixing with chemicals Beware of following materials: none

10.2 Chemical stability:

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions:

Mixing with other chemicals may produce unexpected reactions

10.4 Conditions to avoid:

Do not expose the mixture to humidity and raised temperature

10.5 Incompatible Materials:

Avoid contact with strong acids, alkalis and oxidising agents. Materials to Avoid: Strong Oxidising Agents, Hydrofluoric Acid. Avoid contact with moisture as product may become microbially active and deteriorate.

10.6 Hazardous decomposition products May release oxides of carbon during fire.

11. Toxicological Information



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11.1 Information on toxicological effects Mixture:

- a) Acute toxicity – non toxic
- b) Irritation – not an irritant
- c) Corrosivity – non corrosive
- d) Sensitisation – may cause sensitisation in certain susceptible individuals.
- e) Repeated dose toxicity – non toxic
- f) Carcinogenicity – non carcinogenic
- g) Mutagenicity – non mutagenic
- h) Toxicity for reproduction – non toxic

Information on likely routes of exposure:

Inhalation: may cause mechanical irritation to lungs Silicosis of the lung may result from excessive inhalation of respirable particles (up to 10 microns in size) over an extended period

Skin: not absorbed through skin, Prolonged contact may cause dryness of the skin

Eyes: dust may cause eye irritation, irritation and smarting.

Ingestion: unlikely to be harmful if swallowed

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

If inhaled, may cause shortness of breath.

Delayed and immediate effects and chronic effects from short and long term exposure.

If inhaled, may cause shortness of breath

Interactive Effects:

None

Absence of data:

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

Other Information

Not applicable

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: Not toxic.

Acute Toxicity – Aquatic Invertebrates: Not toxic. Acute Toxicity

– Aquatic Plants: Not toxic.

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

Mycorrhizal Fungi are not classified as PBT or vPvB substances



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Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

REACH – Exempted in accordance with Annex V.7

Workplace Exposure Limits 2005 (EH40)

15.2 Chemical Safety Assessment

No data available

16. Other Information

This safety data sheet has been prepared in accordance with Regulations (EC) of the European Parliament Council No 1272/2008 and Commission Regulation (EU) No 453/2010.

The above information is based on present knowledge of the product at the time of publication. It is given in good faith and no warranty is implied with respect to the specification of quality of the product. The user must satisfy himself that the product is entirely suitable for the purpose.

Disclaimer

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