



SAFETY DATA SHEET
SYMBIO MYCORRHIZAL WHIP DIP

SDS COMPLETED 3RD OCTOBER 2019

VERSION 02
REVISION NUMBER: N/A

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

1.1 Product Name:

Symbio Mycorrhizal Whip Dip

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. Supplied with water storing granules.

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

1.4 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 according to Directive EC 1272/2008 Classification, Labelling and Packaging

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

CLASSIFICATION according to Directive 1999/45/EC and statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulation

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. 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.

Not a hazardous substance or mixture according to Directive 1999/45/EC.



SAFETY DATA SHEET SYMBIO MYCORRHIZAL WHIP DIP

SDS COMPLETED 3RD OCTOBER 2019

VERSION 02
REVISION NUMBER: N/A

2.2 Label elements:

Signal Word: Warning

Hazard Symbols



Hazard Statement:

May cause respiratory irritation

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 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 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 Fullers Earth (Attapulgite-type clay). With water retaining polymers

CAS No. 12173-10-3

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 to person to fresh air, keep person quiet and warm, in case of respiratory failure administer artificial respiration, seek medical attention. If unconscious place in recovery position and seek medical advice.

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. Seek medical attention if symptoms persist or develop.

After ingestion: Rinse mouth with water, drink plenty of water. Do not induce vomiting. Seek medical attention if symptoms persist or develop.

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



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SDS COMPLETED 3RD OCTOBER 2019

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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. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the mixture:

Thermal decomposition may produce nitrogen oxides (NO_x), carbon oxides (CO_x). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

5.3 Advice for fire fighters:

Firefighters should be equipped with breathing apparatus appropriate to environmental conditions and wear protective clothing. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product swells in water.

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. Ensure adequate ventilation. No special protective equipment required. Wash hands thoroughly after handling.

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:

Do not empty into watercourse. Retain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up:

Do not flush with water. Scoop up spillages and place in a container. Avoid creating dusts. Wear appropriate respiratory protection, safety glasses and overalls as a precaution.

6.3.1 containment:

Keep in suitable, closed containers for disposal.

6.3.2 clean-up:

Avoid creating dust, preferably vacuum clean and collect in suitable labelled containers for waste.

6.3.3 other information relating to spills and releases:

not applicable



SAFETY DATA SHEET

SYMBIO MYCORRHIZAL WHIP DIP

SDS COMPLETED 3RD OCTOBER 2019

VERSION 02
REVISION NUMBER: N/A

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. Aqueous solutions or powders that become wet render surfaces extremely slippery.

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 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:

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

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.

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



SAFETY DATA SHEET SYMBIO MYCORRHIZAL WHIP DIP

SDS COMPLETED 3RD OCTOBER 2019

VERSION 02
REVISION NUMBER: N/A

- 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 Swell Gels - Granular solid or powder |
| b) Odour: | Slight earth-like odour |
| c) Odour threshold: | not known |
| d) pH: | 7.0-8.0 |
| e) melting point/freezing point: | Approx. 1710°C |
| f) boiling point: | 2230°C |
| g) flash point: | not applicable |
| h) evaporation rate: | not applicable |
| i) flammability: | Non-flammable |
| j) explosive limits: | Not expected to create explosive atmospheres |
| k) vapour pressure: | not applicable |
| l) vapour density: | not applicable |
| m) relative density: | 0.7-0.8 g/cm ³ |
| n) solubility in water: | insoluble |
| o) partition coefficient: | -2 |
| 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



SAFETY DATA SHEET
SYMBIO MYCORRHIZAL WHIP DIP

SDS COMPLETED 3RD OCTOBER 2019

VERSION 02
REVISION NUMBER: N/A

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.

Thermal decomposition may produce: nitrogen oxides (NO_x), carbon oxides (CO_x).

11. Toxicological Information

11.1 Information on toxicological effects Mixture:

- a) Acute toxicity – LD50/oral/rat >5000mg/kg
- b) Acute dermal toxicity: LD50/dermal/rat >5000mg/kg
- c) Irritation – not an irritant
- d) Corrosivity – non corrosive
- e) Sensitisation – may cause sensitisation in certain susceptible individuals.
- f) Repeated dose toxicity – non toxic
- g) Carcinogenicity – no toxicity data available. Does not meet the criteria for carcinogens under regulation EC1272/2008
- h) Mutagenicity – non mutagenic
- i) Toxicity for reproduction – non toxic

Information on likely routes of exposure:

Inhalation: Inhalation of excessive concentrations of dust may cause irritation of mucus membranes and upper respiratory tract.

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 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 – LC50/Danio rerio/96 hours >100mg/L (OECD 203)

Acute Toxicity – Aquatic Invertebrates: EC50/Daphnia magna/48 hours >100mg/L (OECD 202)– Aquatic Plants: Not toxic.



SAFETY DATA SHEET

SYMBIO MYCORRHIZAL WHIP DIP

SDS COMPLETED 3RD OCTOBER 2019

VERSION 02
REVISION NUMBER: N/A

Acute toxicity to algae: IC50/Scenedesmus subspicatus/72 hours >100mg/L (OECD 201)

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

12.6 Other adverse effects:

Not determined

13. 13. Disposal Considerations

General information
This mineral can be disposed of as a non-toxic/inactive material in approved landfill sites in accordance with local regulations.

13.1 Waste treatment methods Product:

Use licensed waste disposal company Contaminated packaging:
Dispose of as unused product.

14. Transport Information

General
No special precautions. The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1 UN Number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name:

ADR/RID: not dangerous goods
IMDG: not dangerous goods
IATA: not dangerous goods

14.3. Transport hazard class(es)

Not Classified ADR/RID: - IMDG: - IATA: -

14.4. Packaging Group

ADR/RID: - IMDG: - IATA: -

14.5. Environmental hazards

ADR/RID: no IMDG marine pollutant: no IATA: no



SAFETY DATA SHEET
SYMBIO MYCORRHIZAL WHIP DIP

SDS COMPLETED 3RD OCTOBER 2019

VERSION 02
REVISION NUMBER: N/A

14.6. Special precautions for user

No

14.7 Transport in bulk according to Annex II MARPOL 73/78 and the IBC code

not regulated

15. Regulatory Information

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

Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

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)

This substance/mixture is classified and labelled in accordance with Regulation EC 1272/2008, Directive 1999/45/EC, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations and the EC Fertiliser Regulations 2003, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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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