



SAFETY DATA SHEET
SYMBIO BIOTABS

SDS COMPLETED 13TH JUNE 2017

VERSION 01
REVISION NUMBER: N/A

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

1.1 Product Name:

Symbio BioTabs

1.2 Relevant identified uses

Soil amendment

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 telephone number

Emergency telephone numbers +44 (0)1428 685762

2. Hazards Identification

2.1 Classification of the mixture:

Chemical characterization: Mixture

Description: Mixture of the substances listed below with non hazardous additions.

Dangerous components:

77-92-9 Citric Acid ! Eye Irrit. 2A, H319 20-40% 110-17-8

Additional information: For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

2.2 Label elements:

GHS07



Eye Irrit. 2A H319 Causes serious eye irritation.

Label Elements:

Hazard Pictograms

GHS07



Signal word: Warning



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Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear eye protection / face protection.

P264 Wash thoroughly after handling.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

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 tablet form of fungal and bacterial spores

INGREDIENT	CAS No	%,w/w
Citric Acid	77-92-9	50%
Sodium Bicarbonate	144-55-8	49.2%
Lemon Yellow	1306-23-6	0.2%
Brilliant Blue	3844-45-9	0.2%
Proprietary Bacteria & Fungi Blend	Not required	0.4%

Dangerous components:

77-92-9	Citric Acid	 Eye Irrit. 2A, H319	50%
110-17-8	Fumaric Acid	 Eye Irrit. 2A, H319	10-20%

4. First Aid Measures

4.1 Description of first aid measures:

General information: Take affected persons out into the fresh air. Inhalation: Supply fresh air; consult doctor in case of complaints.

Skin contact: Brush off loose particles from skin. Immediately rinse with water. If skin irritation continues, consult a doctor.

Eye contact: Rinse opened eye for several minutes under running water. Remove contact lenses if worn.

Ingestion: Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.

4.2 Most important symptoms and effects,

Both acute and delayed: Breathing difficulty. Irritant to eyes. Gastric or intestinal disorders

Indication of any immediate medical attention and special treatment needed: If necessary oxygen respiration treatment.

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

Follow advice in 4.1



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5. Fire Fighting Measures

5.1 Extinguishing media:

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents: None.

5.2 Special hazards arising from the mixture:

Special hazards arising from the substance or mixture: No further relevant information available.

5.3 Advice for fire fighters:

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information: No further relevant information available.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation. Isolate area and prevent access.

6.1.1 non-emergency personnel

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

6.1.2 Emergency personnel

See 6.1.1

6.2 Environmental Precautions:

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically. Dispose contaminated material as waste according to item 13. Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13. Send for recovery or disposal in suitable receptacles.

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:

Use only in well ventilated areas. Prevent formation of dust. Any deposit of dust which cannot be avoided must be regularly removed. Avoid breathing dust.



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7.2 Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles: Provide ventilation for receptacles.
Information about storage in one common storage facility: Store away from foodstuffs. Store away from water. Do not store together with alkalis (caustic solutions). Do not store together with acids. Further information about storage conditions: Keep receptacle tightly sealed. Protect from humidity and water. This product is hygroscopic. Specific end use(s): No further relevant information available.

7.3 Specific End Use:

The mixture is designed to be diluted with water prior to use. See label for specific instructions

8. Exposure Controls

8.1 Control Parameters:

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls:

8.2.1 Individual Protection Measures, such as personal protective equipment:

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale dust / smoke / mist.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Engineering controls: No further relevant information available.

Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present.

For spills, respiratory protection may be advisable.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Contact lenses should not be worn.



Safety glasses

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment: No further relevant information available.

Risk management measures: See Section 7 for additional information. No further relevant information available.



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9. Physical and Chemical Properties

9.1 On basic physical and chemical properties

Form:	Solid Tablet
Colour:	Green
Odour:	Odourless
Odor threshold:	Not Determined
pH-value:	7-8m Dissolved
Change in condition	
Melting point/Melting range:	Undetermined
Boiling point/Boiling range:	Undetermined
Flash point:	Not Applicable
Flammability (solid, gaseous):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Auto igniting:	Product is not self-igniting
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not applicable
Density:	Not determined
Relative density:	Not determined
Vapour density:	Not applicable
Evaporation rate:	Not applicable
Solubility in / Miscibility with Water:	Soluble
Partition coefficient (n-octanol/water):	Not determined
Viscosity:	Dynamic: Not applicable Kinematic: Not applicable

9.2 Other Information:

No further relevant information available.

10. Stability and Reactivity

10.1 Reactivity:

No decomposition if used and stored according to specifications.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

Heating occurs when water is added. Reacts with strong acids. Reacts with oxidizing agents.

10.4 Conditions to avoid:

Avoid acids. Moisture. No decomposition if used and stored according to specifications.

10.5 Incompatible Materials:

None



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10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide

11. Toxicological Information

11.1 Information on toxicological effects Mixture:

Acute toxicity:

LD/LC50 values that are relevant for classification: None.

Primary irritant effect:

Skin: No irritant effect.

Eye: Irritating effect.

Subacute to chronic toxicity: No further relevant information available.

Additional toxicological information: Irritant

Carcinogenic categories:

USA - NTP (National Toxicology Program): None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients is listed.

Probable Routes of Exposure: Inhalation. Eye contact. Skin contact. Ingestion.

Acute effects (acute toxicity, irritation and corrosivity): Irritating to eyes.

Repeated Dose Toxicity: No further relevant information available.

Sensitization: Not determined.

12. Ecological Information

12.1 Toxicity:

Dissolve product in water and apply to golf green, tee box and/or any grass or soil. This product has been successfully used on farms, turf, golf courses, soils and gardens without any known negative side effects or known damage to the environment. The organisms in this product are naturally occurring soil microbes, NOT genetically modified, and non-pathogenic to humans, plants or animals.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Result of PBT and vPvB assessment

Not classified as PBT or vPvB substances

12.6 Other adverse effects:

General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Other adverse effects: No further relevant information available.



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13. 13. Disposal Considerations

13.1 Waste treatment methods Product:

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements. Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and non-hazardous wastes. Residual materials should be treated as hazardous.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14. Transport Information

14.1 UN Number

Not Regulated

14.2 UN proper shipping name:

Not Regulated

14.3. Transport hazard class(es)

Not Regulated

14.4. Packaging Group

Not Regulated

14.5. Environmental hazards

No

14.6. Special precautions for user

Not applicable

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

Not applicable

15. Regulatory Information

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

The preparation is exempt from REACH requirements as the preparation contains biological material and is not a substance.

Safety, health and environmental regulations/legislation specific for the substance or mixture · United States (USA)

SARA

Section 355 (extremely hazardous substances): None of the ingredients is listed.

Section 313 (Specific toxic chemical listings): None of the ingredients are listed.



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TSCA (Toxic Substances Control Act): All ingredients are listed.

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.

Chemicals known to cause developmental toxicity: None of the ingredients is listed.

Carcinogenic categories

USA EPA (Environmental Protection Agency): None of the ingredients is listed.

IARC (International Agency for Research on Cancer): None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH): None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients is listed.

State Right to Know Listings: None of the ingredients is listed.

Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

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.

Disclaimer

The information in this SDS was obtained from sources which we believe to be reliable. Symbio 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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Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A