



SAFETY DATA SHEET
SYMBIO MYCOGRO 10-3-14+3.3%MgO+2%Fe

SDS COMPLETED 9TH DECEMBER 2019
UPDATED: 20TH FEBRUARY 2020

VERSION 01
REVISION NUMBER: 2

1. Identification of the Substance and the Company

1.1. Product identifier

Product name Symbio 10-3-14+3.3%MgO+2%Fe+ Soil Bacteria and Fungi

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Fertiliser

1.3. Details of the supplier of the 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 No. :

Emergency telephone +44 (0) 1428 685762

2. Hazards Identification

2.1. Classification of the substance or mixture Classification

Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319
Environmental hazards	Not Classified

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation
H319 Causes serious eye irritation

Precautionary statements P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

Mixture not classed as PBT or vPvB. 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.



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VERSION 01
REVISION NUMBER: 2

3. Composition/Information on Ingredients

3.2. Mixtures

Compound fertiliser containing 10% nitrogen, 3% phosphorous pentoxide, 14% potassium oxide, 2% iron, 2% magnesium

Ingredient	CAS/EINECS	Classification	% w/w
SSP Single Superphosphate	8011-76-5	Eye irr 2 H319	10-30%
	232-379-5	Xi: R41	
Ingredient	CAS/EINECS	Classification	% w/w
Ferrous Sulphate Heptahydrate	7720-78-7	Acute tox 4 H302	5-10%
		Skin irr 2 H315	
		Eye irr 2 H319	

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

Eye contact – Immediately rinse with clean water for 15 minutes. Seek medical attention if symptoms persist or develop.

Skin contact – Wash skin thoroughly with soap and water or use an approved skin cleanser. Get medical attention if symptoms are severe or persist after washing.

Ingestion – wash out mouth with water and seek medical advice.

Inhalation – remove to fresh air.

4.2. Most important symptoms and effects, both acute and delayed

Eye Contact: Prolonged or repeated exposure may cause severe irritation. May cause severe eye irritation.

Skin Contact: May cause skin irritation. Prolonged skin contact may cause temporary irritation. Skin irritation should not occur when used as recommended.

Ingestion: Based on components, product is considered to present little hazard by oral exposure.

Inhalation: Unlikely to cause harmful effects under normal handling and use.

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

None

Additional medical guidance is available to doctors from the National Poisons Information Service.

5. Fire-Fighting Measures

Non flammable

5.1. Extinguishing media

Use foam, carbon dioxide, dry powder, sand. The mixture is not classified as flammable. As such extinguishing media appropriate for surrounding materials should be chosen.

5.2. Special hazards arising from the substance or mixture

Possible irritant fumes arising from product decomposition.

5.3. Advice for firefighters

Contain spread of extinguishing fluids. Wear self-contained breathing apparatus in confined spaces.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Wear protective gloves and eye protection. Wash hands and exposed skin after handling.



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VERSION 01
 REVISION NUMBER: 2

6.2. Environmental precautions

Do not allow to enter drains or sewers.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel product or use other means and place in container for reuse (preferred) or disposal.

7. Handling and Storage

7.1. Precautions for safe handling

Ensure good ventilation at workplace. Ensure good hygiene practices are observed. Do not eat, drink or smoke when handling this product. Do not breathe dust. Avoid contact with skin and eyes. Ensure workplace exposure limits are observed. Do not block stack pallets.

7.2. Conditions for safe storage, including any incompatibilities

Store in original containers, tightly closed in a secure, well ventilated, cool but frost-free, dry area. Store clear of foodstuffs and in a separate stack from herbicides.

7.3. Specific end use(s)

Fertiliser

8. Exposure controls/ Personal protection

8.1. Control parameters Occupational exposure limits

Occupational Exposure Limits

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust). Nuisance dust:

Inhalable dust 10 mg/m³, Respirable dust 4 mg/m³

Sand (Silica Dust respirable), Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	0.1	mg/m ³
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Ammonium Sulphate, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m ³
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Dolomite, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m ³ inhalable dust
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Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m ³ respirable dust
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Calmag Magnesium Oxide, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m ³ inhalable dust
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Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m ³ respirable dust
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Urea, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m ³ inhalable dust
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Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m ³ respirable dust
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Ferrous Sulphate 18%, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	1	mg/m ³
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Ferrous Sulphate 18%, Short-term Exposure Limit (LTEL)

Short-term Exposure Limit (15 minute) WEL	2	mg/m ³
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Ferrous Sulphate Heptahydrate (CAS 7782-63-0), Desired No Effect Level (DNEL)

Worker

Acute systemic effects dermal:	2.8	mg/kg/day
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Acute systemic effects inhalative:	9.9	mg/m ³
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Systemic long-term effects dermal:	2.8	mg/kg/day
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Systemic long-term effects inhalative:	9.9	mg/m ³
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General Population

Acute systemic effects oral:	1.4	mg/kg/day
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Acute systemic effects dermal:	1.4	mg/kg/day
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Acute systemic effects inhalative:	2.5	mg/m ³
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SDS COMPLETED 9TH DECEMBER 2019
UPDATED: 20TH FEBRUARY 2020

VERSION 01
REVISION NUMBER: 2

Systemic long-term effects oral:	1.4	mg/kg/day
Systemic long-term effects dermal:	1.4	mg/kg/day
Systemic long-term effects inhalative:	2.5	mg/m3

Ferrous Sulphate Heptahydrate (CAS 7782-63-0), Predicted No Effect Concentration (PNEC)

The PNECs given in this section were derived based on the concentration which would cause a 10% increase above typical natural background levels of iron in soil and sediment. Thus the respective PNEC is equal to 110% of the typical natural background level of iron.

Water

Iron is an essential trace element for fish, aquatic invertebrates and plants. A direct toxicity could not be demonstrated in tests. Therefore no PNEC was derived.

Sewage Treatment Plants, Sediment and Soil

STP	500	mg/L
Sediment (Fresh Water)	49.5	g/kg
Sediment (Marine Water)	49.5	g/kg
Soil	55.5	g/kg

Oral (food chain)

Iron is an essential trace element for fish, aquatic invertebrates and plants. A direct toxicity could not be demonstrated in tests, therefore no PNEC was derived.

SSP Single Superphosphate (CAS 8011-76-5), Desired No Effect Level (DNEL)

Worker

Systemic long-term effects dermal:	17.4	mg/kg/day
Systemic long-term effects inhalative:	3.1	mg/m3

General Population

Systemic long-term effects dermal:	10.4	mg/kg/day
Systemic long-term effects inhalative:	0.9	mg/m3
Systemic long-term effects oral:	2.1	mg/kg/day

SSP Single Superphosphate (CAS 8011-76-5), Predicted No Effect Concentration (PNEC)

Fresh water	1.7	mg/L
Marine water	0.17	mg/m3
Intermittent release	17	mg/L
STP	10	mg/L

Potash (CAS 7447-40-7), Desired No Effect Level (DNEL)

Worker

Systemic long-term effects dermal:	580	mg/kg/day
Systemic long-term effects inhalative:	292	mg/m3
Systemic short-term effects dermal:	580	mg/kg/day
Systemic short-term effects inhalative:	292	mg/m3

Potash (CAS 7447-40-7), Predicted No Effect Concentration (PNEC)

Fresh water	0.047	mg/L
Marine water	0.047	mg/m3

8.2. Exposure controls

Protective equipment



Gloves: wear protective gloves.

Eye/face protection: wear eye protection.

Engineering controls: all handling should only take place in well-ventilated areas.

Clothing: wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures: wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

Respiratory protection: no specific recommendations



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SDS COMPLETED 9TH DECEMBER 2019
UPDATED: 20TH FEBRUARY 2020

VERSION 01
REVISION NUMBER: 2

9. Physical and Chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Beige to dark brown granules
Odour	Mild
pH	Slightly Acidic
Boiling point	n/a
Melting point	n/a
Flash point	n/a
Flammability	n/a
Autoflammability	n/a
Explosivity	n/a
Oxidising properties	n/a
Vapour Pressure	n/a
Relative density	n/a
Solubility	n/a
Decomposition temperature	n/a

9.2. Other information

None

10. Stability and Reactivity

10.1. Reactivity

Stable under normal conditions of storage and use

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Information not available

10.4. Conditions to avoid

Extremes of temperature

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Decomposes at high temperatures producing toxic nitrogen and sulphur oxide fumes.

11. Toxicological information

11.1. Information on toxicological effects acute toxicity - oral

Acute toxicity – oral

ATE oral (mg/Kg): 4,650.1

Acute toxicity – dermal

Notes (dermal LD50)

No specific test data are available.

Acute toxicity – inhalation

Notes (inhalation LC50)

No specific test data are available.



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Serious eye damage/irritation

Irritation of eyes is assumed. In-vitro testing conducted on products with SSP Content <62%, 2015, Result: Reduced classification to Eye Irritant from Eye Damage. This result is less severe than the harmonized classification for Super Phosphates as Eye Damage 1 H318.

Respiratory sensitisation

No specific test data are available.

Skin sensitisation

Not determined.

Germ cell mutagenicity

Genotoxicity - in vitro

This substance has no evidence of mutagenic properties.

Carcinogenicity

No specific test data are available.

Reproductive toxicity

Reproductive toxicity - fertility

Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated 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.

Eye contact

The product is considered to be a low hazard under normal conditions of use. May cause eye irritation.

Ecotoxicity

The product is not expected to be toxic to aquatic organisms

12. Ecological information

12.1. Toxicity

Not classified as hazardous. Provides nutrients essential to plant growth.

12.2. Persistence and degradability

The product is slowly degradable.

12.3. Bioaccumulative potential

Partition coefficient not known.

12.4. Mobility in soil

No data.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

No data



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VERSION 01
REVISION NUMBER: 2

13. Disposal considerations

Disposal route should not permit contamination of groundwater.

13.1. Waste treatment methods

Dispose of waste through a reputable waste disposal contractor in accordance with the Environmental Protection Act 1990.

14. Transport information

ADR, IMDG, IATA Not applicable

14.1. UN number

ADR, IMDG, IATA Not applicable

14.2. UN proper shipping name

ADR, IMDG, IATA Not applicable

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

ADR, IMDG, IATA Not applicable

14.5. Environmental hazards

Not a marine pollutant

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

15. Regulatory information

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

This substance is classified and labelled in accordance with regulation 1999/45/EC, 1272/2008, 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

Not undertaken for this material

16. Other information

Text of the hazard statements mentioned in Section 3:

H302 Harmful if swallowed

H315 Causes skin irritation

H319: Causes serious eye irritation

Reason for revision

MSDS re-formatted in-line with regulation 453/2010 all sections affected.



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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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