

SDS COMPLETED 9<sup>TH</sup> DECEMBER 2019 UPDATED: 16 DECEMBER 2020

Version 02
Revision number: 0

# Section 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:

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 Telephone No. :

**Emergency phone No.** 0800 138 7222 (09.00 – 17.00 GMT Monday – Friday)

National emergency telephone number 111

#### Section 2. Hazards Identification

### 2.1. Classification of the substance or mixture Classification

Physical hazards Not Classified

Health hazards Eye dam. 1 - H318

Skin irrit. 2-H315

Environmental hazards Not Classified

#### 2.2. Label elements

Signal word DANGER

Hazard statements H315 Causes skin irritation

H318 Causes serious eye damage

Precautionary statements P264 Wash contaminated skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/...

P321 Specific treatment (see ... on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.



SDS COMPLETED 9<sup>TH</sup> DECEMBER 2019 VERSION 02 UPDATED: 16 DECEMBER 2020 REVISION NUMBER: 0

#### 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.

#### Section 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/EC no. Classification % w/w SSP Single Superphosphate 8011-76-5 Eye dam 1 H318 10-30%

232-379-5

% 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 Hazard Statements are Displayed in Section 16.

#### Section 4. First Aid Measures

#### 4.1. Description of first aid measures

Eye contact - Immediately rinse with clean water for 15 minutes. Immediately call a doctor

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: Causes serious eye damage. Immediately call a doctor

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.

# Section 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.



SDS COMPLETED 9<sup>TH</sup> DECEMBER 2019 UPDATED: 16 DECEMBER 2020

VERSION 02
REVISION NUMBER: 0

#### Section 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.

#### 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.

# Section 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

# Section 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)

Sand (Sinca Dust respirable), Long-term Exposure Limit (LTEL)		
Long-term Exposure Limit (8 hour TWA) WEL	0.1	mg/m3
Ammonium Sulphate, Long-term Exposure Limit (LTEL)		
Long-term Exposure Limit (8 hour TWA)	10	mg/m3
Dolomite, Long-term Exposure Limit (LTEL)		
Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m3 inhalable dust
Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m3 respirable dust
Calmag Magnesium Oxide, Long-term Exposure Limit (LTEL)		
Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m3 inhalable dust
Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m3 respirable dust
Urea, Long-term Exposure Limit (LTEL)		
Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m3 inhalable dust
Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m3 respirable dust
Ferrous Sulphate 18%, Long-term Exposure Limit (LTEL)		
Long-term Exposure Limit (8 hour TWA) WEL	1	mg/m3
Ferrous Sulphate 18%, Short-term Exposure Limit (LTEL)		
Short-term Exposure Limit (15 minute) WEL	2	mg/m3
Ferrous Sulphate Heptahydrate (CAS 7782-63-0), Desired No Effect Lev	rel (DNEL)	
Worker		
Acute systemic effects dermal:	2.8	mg/kg/day
Acute systemic effects inhalatie:	9.9	mg/m3



	VERSION 02 REVISION NUMBER: 0
2.8	mg/kg/day
9.9	mg/m3
1.4	mg/kg/day
1.4	mg/kg/day
2.5	mg/m3
1.4	mg/kg/day
1.4	mg/kg/day
2.5	mg/m3
	9.9 1.4 1.4 2.5 1.4 1.4

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. 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. 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



SDS COMPLETED 9<sup>TH</sup> DECEMBER 2019 UPDATED: 16 DECEMBER 2020

VERSION 02
REVISION NUMBER: 0





Gloves: Nitrile gloves PPE Cat. III according to (EU) regulation, 2016/425, thickness 0.15-0.12 mm, breakthrough time, 8 hours. Please also consider your own risk assessment; e.g. tasks undertaken

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: Approved dust mask or respirator (e.g. EN 149:2001 FFP3) for dust if ventilation is insufficient

#### Section 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 Auto flammability 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

# Section 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.



SDS COMPLETED 9<sup>TH</sup> DECEMBER 2019 UPDATED: 16 DECEMBER 2020

Version 02
Revision number: 0

#### Section 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.

#### Serious eye damage/irritation

Causes serious dames to the eye. Call for medical assistance immediately.

#### **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.

#### **Eve contact**

The product is low hazard under normal conditions of use. May cause serious eye damage

#### **Ecotoxicity**

The product is not expected to be toxic to aquatic organisms

# Section 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.



SDS COMPLETED 9<sup>TH</sup> DECEMBER 2019 UPDATED: 16 DECEMBER 2020

Version 02
Revision number: 0

#### 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

#### Section 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.

### Section 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.

# Section 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 1272/2008, the statutory instrument No.716 2009 (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),

#### 15.2. Chemical safety assessment

Not undertaken for this material

#### Section 16. Other information

Text of the hazard statements mentioned in Section 3:



SDS COMPLETED 9<sup>TH</sup> DECEMBER 2019 UPDATED: 16 DECEMBER 2020

Version 02
Revision number: 0

H302 Harmful if swallowed H315 Causes skin irritation H318 Causes serious eye damage H319: Causes serious eye irritation

Reason for revision
Re-classified as H318 Causes serious eye damage.

#### 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.

Origin Amenity Solutions makes no warranties or guarantees either express or implied with respect to the information contained herein. The conditions or methods of handling, storage, use or disposal of the product are beyond our control, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product