

1. Identification of the Substance and the Company

1.1. Product identifier

Product name: SYMBIO DEFENDER

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

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

2. Hazards Identification

2.1. Classification of the substance or mixture Classification

Classification under CLP: Skin Irrit. 2: H315; Eye Irrit. 2: H319

Most important adverse effects: Causes skin irritation; Causes serious eye irritation.

2.2. Label elements

Label elements:

Hazard statements: H315: Causes Skin Irritation

H319: Causes serious eye irritation.

Hazard pictograms: GHS07: Exclamation mark



Signal words: Warning

Precautionary statements:

P264: Wash hands thoroughly after handling.

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

P302 +352: IF ON SKIN: Wash with plenty of water

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+313: If skin irritation occurs: Get medical attention

P337+313: If eye irritation persists: Get medical attention.

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2.3 Other Hazards

Mixture not classified as PBT or vPvB

3. COMPOSITION OF INGREDIENTS

3.2 Mixtures

Hazardous ingredients:

FERROUS SULPHATE HEPTAHYDRATE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
231-753-5	7782-63-0	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315	10-30%

COPPER EDTA - REACH registered number(s): 01-2119963944-23-0002

-	14025-15-1	-	Eye Irrit. 2: H319; Acute Tox. 4: H302	1-10%
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4. First Aid Measures

4.1 Any special measures:

Skin contact: Wash immediately with plenty of soap and water.
Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
Ingestion: Wash out mouth with water.
Inhalation: Not applicable.

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

Skin contact: There may be irritation and redness at the site of contact.
Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.
Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Not applicable

5. Fire Fighting Measures

5.1 Suitable extinguishing media:

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): Biostimulant

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

Hazardous ingredients:

COPPER EDTA

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	1.8	Workers	Local
DNEL	Dermal	3750	Workers	Local
DNEL	Inhalation	0.45	General Population	Local
DNEL	Dermal	1875	General Population	Local
DNEL	Oral	0.375	General Population	Local
PNEC	Fresh water	2.95	General Population	Local
PNEC	Marine water	0.3	General Population	Local
PNEC	Microorganisms in sewage treatment	65.4	General Population	Local
PNEC	Soil (agricultural)	0.21	General Population	Local

8.2. Exposure controls

Engineering measures:	Ensure there is sufficient ventilation of the area.
Respiratory protection:	Self-contained breathing apparatus must be available in case of emergency.
Hand protection:	Protective gloves.
Eye protection:	Tightly fitting safety goggles. Ensure eye bath is to hand..
Skin protection:	Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Liquid
Colour:	Brown
Evaporation rate:	No data available.
Oxidising:	No data available.
Solubility in water:	No data available.
Viscosity:	No data available.
Boiling point/range°C:	No data available.
Melting point/range°C:	No data available.
Flammability limits %: lower:	No data available.
upper:	No data available.
Flash point°C:	No data available.
Part.coeff. n-octanol/water:	No data available.
Autoflammability°C:	No data available.
Vapour pressure:	No data available.
Relative density:	1.16-1.20 kg/l
pH:	3.0-4.0
VOC g/l:	No data available.

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9.2. Other Information

No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

FERROUS SULPHATE HEPTAHYDRATE

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	300-2000	mg/kg

COPPER EDTA

DUST/MIST	RAT	4H LC50	>5.32	mg/kg
ORAL	RAT	LD50	890	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin Corrosion/irritation	DRM	Hazardous: calculated

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Serious eye damage/irritation	OPT	Hazardous: calculated
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Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Section 12: Ecological information

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

12.1. Toxicity

Hazardous ingredients:

COPPER EDTA

FISH	96H LC50	555	mg/l
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12.2. Persistence and degradability

Persistence and degradability: Biodegradable

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Dispose of waste and residues in accordance with local authority requirements.

Recovery operations: Dispose of in compliance with all local and national requirements.

Disposal of packaging: Empty containers should be disposed of in accordance with local and national regulations.
NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: 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.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

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.

Revisions: This version supersedes all previous versions

Section 2 Hazards – Updated hazards – Skin irritation

Minor editorial changes throughout

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.

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Phrases used in s2 and s3.

Full text of H-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.