

#### SDS COMPLETED 1<sup>ST</sup> JULY 2015

VERSION 01 REVISION NUMBER: N/A

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

#### **1.1 Product Identifier:**

Symbio Liquid Boron

#### **1.2** Relevant uses of the substance or mixture and uses advised against:

Supplied for use as a professional use 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 phone number

**Phone number:** +44 (0) 1428 685762

# 2. Hazards Identification

# 2.1 Classification of the substance or mixture

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

#### Repr. 1B; H360FD May damage fertility or the unborn child.

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

#### T; R60-61 May impair fertility. May cause harm to the unborn child.

#### **Primary Hazard**

May damage fertility or cause harm to the unborn child.

### 2.2 Label Elements

#### Symbio Liquid Boron

(contains: Boric Acid E.C. 233-139-2)



#### Signal word: Danger

#### Hazard Statements:

H360FD May damage fertility or the unborn child.

#### **Precautionary Statements**

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P308 + P313	IF exposed or concerned: Get medical advice/attention.



#### SDS COMPLETED 1<sup>ST</sup> JULY 2015

VERSION 01 REVISION NUMBER: N/A

# 2.3 Other Hazards

Mixture not classed as PBT or vPvB

### 3. Composition/information on ingredients

#### 3.2 Mixtures

#### 3.3 Hazardous components

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s)	R-phrase(s)	Concentrations [%]
Boric acid	10043-35-3/ 233-139-2	Index no.: 005-007-00-2 REACh registration no.: 01-2119486683-25	According to 1272/2008: GHS08	According to 1272/2008: Repr. 1B H360FD	35.0 - 45.0
			According to 67/548/EEC: TOXIC Reproductive Category 2	According to 67/548/EEC: Repr. Cat. 2 R60, R61	

The full hazard information for individual components if not displayed in section 2 or 3 are displayed in Section 16.

#### 4.0. First Aid Measures

#### 4.1 Description of first aid measures

#### 4.1.1 Inhalation

Remove from source of exposure to fresh air; seek medical attention.

# 4.1.2 Skin & Eye exposure

Drench immediately with water. Remove any contaminated clothing and launder before re-use. Seek medical attention if symptoms persist or develop.

Eyes: Rinse cautiously for several minutes, Remove contact lenses, if present and easy to do, rinse with clean water for 15 minutes. Seek medical attention IMMEDIATELY.

# 4.1.3 Ingestion

Do not induce vomiting. Wash out mouth with water and give water to drink. Obtain medical attention IMMEDIATELY.



#### SDS COMPLETED 1<sup>ST</sup> JULY 2015

VERSION 01 REVISION NUMBER: N/A

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

General information (Boric acid)

Prolonged or repeated exposure may cause: Convulsions. Anaemia. May cause damage to the liver and kidneys.

Inhalation: May cause irritation to mucous membranes. Nausea, vomiting. Diarrhoea. Drowsiness, dizziness, disorientation, vertigo. Headache.

Hypotension (low blood pressure). Renal injury. Cyanosis (blue tissue condition, nails, lips, and/or skin). Prolonged or repeated exposure may cause: Unconsciousness, death. May cause irritation to the respiratory system. Mucous membranes

Ingestion: Fumes from the stomach contents may be inhaled resulting in the same symptoms as inhalation. Skin contact: Skin irritation.

Eye contact: Irritating and may cause redness and pain.

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

Information not available

# 5. Fire-Fighting measures

### 5.1 Extinguishing media

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

#### 5.2 Special Hazards arising from the substance or mixture

Possible irritant fumes arising from combustion

#### 5.3 Advice for fire-fighters

Cool down containers/equipment exposed to heat with a water spray. Contain spread of extinguishing fluids (these fluids may be hazardous for the environment). Wear complete protective clothing and self-contained breathing apparatus

#### 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

The following precautions are considered to be good practice when using any chemicals irrespective of their classification unless otherwise specified.

Use personal protective equipment

-appropriate coveralls and gloves

-eye/face protection

-appropriate respirator

Avoid contact with skin and eyes

### 6.2 Environmental Precautions

Do not allow to enter storm drains or water courses. If this product enters a water course or a sewer (including via contaminated soil & vegetation) contact local water authority and inform the Environment Agency

### 6.3 Methods and material for containment and cleaning up

Use soil, sand or other absorbent material. Contact specialist waste disposal contractor.

#### 6.4 Reference to other sections

No reference necessary

#### 7. Handling and storage



#### SDS COMPLETED 1<sup>ST</sup> JULY 2015

VERSION 01 REVISION NUMBER: N/A

#### 7.1 Precaution for safe handling

Avoid contact with skin and eyes. Wash Hands thoroughly after handling Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool dry atmosphere, in original labelled containers. Refer to manufacturer for maximum safe stacking height. Keep away from heat sources, combustible materials.

# 7.3 Specific end use(s)

No specific information available

### 8. Exposure controls/personal protection

#### 8.1 Control Parameters

#### **Boric Acid:**

Occupational Exposure Limit (OEL): Time-Weighted Average (TWA) 8 hours: 10mg/m<sup>3</sup>

DNEL

DINEE				
Industry	Dermal	Long Term	Systemic Effects	68.6 mg/kg/day
Industry	Inhalation	Long Term	Systemic Effects	1.45 mg/m <sup>3</sup>
Consumer	Oral	Long Term	Systemic Effects	0.17 mg/kg/day
Consumer	Inhalation	Long Term	Systemic Effects	0.97 mg/m <sup>3</sup>
Consumer	Oral	Short Term	Systemic Effects	0.17 mg/kg/day
Consumer	Dermal	Long Term	Systemic Effects	34.3 mg/kg/day

The units are expressed in 'mg/ $\mu$ g' of: Boron. DNELs for "local effects" were not calculated - exposure based waiving (CSR 2010).

PNEC	
Freshwater	1.35 mg/l
Marinewater	1.35 mg/l
Freshwater	Intermittent release 9.1 mg/l
Sediment	1.8 mg/kg
Soil	5.4 mg/kg
STP	1.75 mg/l

The units are expressed in  $mg/\mu g'$  of: Boron. These PNECs are added value PNECs- they are to be added to the natural background levels of: Boron. - in the appropriate compartments (e.g. soils, sediments).

#### 8.2 Exposure controls

Goggles – Eye Protection : goggles/face shield to BS EN166.

Gloves – BS EN374 – chemical protection.

Respirators – BS approved protection device with P3 filter.

# 9. Physical and chemical properties



### SDS COMPLETED 1<sup>ST</sup> JULY 2015

VERSION 01 REVISION NUMBER: N/A

#### 9.1 Information on basic physical and chemical properties

A	Mallan, linuial
Appearance;	Yellow liquid
Odour;	Information not specified
Odour threshold;	Information not specified
рН;	8.0 – 9.0
Melting point/freezing;	Information not specified
Initial boiling point and boiling range;	Information not specified
Flash point;	Information not specified
Evaporation rate;	Information not specified
Flammability (solid, gas);	Information not specified
Upper /lower flammability or explosive limits;	Information not specified
Vapour Pressure;	Information not specified
Vapour density;	Information not specified
Specific gravity;	1.32 – 1.36
Solubility (ies);	Information not specified
Partition coefficient: n-octanol/water;	Information not specified
Auto ignition temperature:	Information not specified
Decomposition temperature:	Information not specified

### 9.2 Other Information

No other relevant information available

# 10. Stability and reactivity

#### 10.1 Reactivity

Unknown

### 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

Possible Irritant fumes

# 11. Toxicological Information

# 11.1 Information on toxicological effects

The mixture has not been assessed for toxicological effects, the mixture classification is given in section 2 based on individual component contents. Individual component hazards are given in section 3 **Toxicological information on hazardous ingredients:** 

Boric acid:



#### SDS COMPLETED 1<sup>ST</sup> JULY 2015

VERSION 01 REVISION NUMBER: N/A

Acute toxicity: Toxic Dose 1 - LD 50 3500 - 4100 mg/kg (oral rat)

Other Health Effects: Toxic to Reproductive Health Category 2.

Skin Corrosion/Irritation: OECD 404 Not irritating. Based on available data the classification criteria are not met.

Serious eye damage/irritation: Not Irritating. Based on available data the classification criteria are not met. Reproductive Toxicity: May impair fertility.

Reproductive Toxicity – Development May cause harm to the unborn child.

Inhalation May cause irritation to the respiratory system.

Ingestion May cause stomach pain or vomiting.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

Specific effects Contains a substance/a group of substances with possible risk of harm to the unborn child and with possible risk of impaired fertility.

# 12. Ecological Information

#### 12.1 Ecotoxicity

Not classified as harmful to the environment.

#### 12.2 Persistence and degradability

Information not available

# 12.3 Bioaccumulative potential

Information not available

#### 12.4 Mobility in soil

Information not available

# 12.5 Results of PBT and vPvB

Not classified

#### 12.6 Other adverse effects

Information not available

# **13.** Disposal considerations

#### **13.1 Waste Treatment Methods**

Use only licensed waste disposal companies. Do not re-use empty containers for any purpose.

# 14. Transport Information

#### 14.1 UN number:

Product is unclassified for transport

#### 14.2 UN proper shipping name:

Product is unclassified for transport

#### 14.3 Transport hazard:

Product is unclassified for transport



#### SDS COMPLETED 1<sup>ST</sup> JULY 2015

VERSION 01 REVISION NUMBER: N/A

#### 14.4 Packing group:

Product is unclassified for transport

#### 14.5 Environmental hazards:

Product is unclassified for transport.

#### **14.6** Special precautions for user:

Not specified

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

Applicable for Maritime bulk transport only. Check with carrier.

### 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 (EC) 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. Regulation (EC)

# 15.2 Chemical Safety Assessment

CSA not undertaken for this substance

# 16. Other Information

#### SDS information:

This safety data sheet is compiled using data submitted for raw materials and practical experience. This product is intended for professional users only.

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 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.

Symbio 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.