

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** **BORON BLUE**  
**Synonym(s)** BORON BLUE

### 1.2 Uses and uses advised against

**Use(s)** LIQUID FERTILISER • LIQUID FERTILIZER

### 1.3 Details of the supplier of the product

**Supplier name** **RURAL LIQUID FERTILISERS PTY LTD**  
**Address** 1/61 Dowd Street, Welshpool, WA, 6106, AUSTRALIA  
**Telephone** (08) 9334 8700; 1800 753 000  
**Fax** (08) 9334 8711  
**Email** [info@rlf.com.au](mailto:info@rlf.com.au)  
**Website** <http://www.ruralliquidfertilisers.com>

### 1.4 Emergency telephone number(s)

**Emergency** Poisons Information Centre: 13 11 26

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

### 2.2 Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

### 2.3 Other Hazards

No information provided.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
ETHANOLAMINE	141-43-5	205-483-3	<5%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

**Ingestion** For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

**First aid facilities** Eye wash facilities should be available.

- 4.2 Most important symptoms and effects, both acute and delayed** See Section 11 for more detailed information on health effects and symptoms.
- 4.3 Immediate medical attention and special treatment needed** Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

- 5.1 Extinguishing media** Use an extinguishing agent suitable for the surrounding fire.
- 5.2 Special hazards arising from the substance or mixture** Non flammable. May evolve toxic gases if strongly heated.
- 5.3 Advice for firefighters** No fire or explosion hazard exists.
- 5.4 Hazchem code** None allocated.

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.
- 6.2 Environmental precautions** Prevent product from entering drains and waterways.
- 6.3 Methods of cleaning up** Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.
- 6.4 Reference to other sections** See Sections 8 and 13 for exposure controls and disposal.

## 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.
- 7.2 Conditions for safe storage, including any incompatibilities** Store in a cool, dry, well ventilated area, removed from incompatible substances.
- 7.3 Specific end use(s)** No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Control parameters**  
**Exposure standards**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Ethanolamine	SWA (AUS)	3	7.5	6	15

**Biological limits** No biological limit values have been entered for this product.

**8.2 Exposure controls**  
**Engineering controls**

Avoid inhalation. Use in well ventilated areas. Maintain vapour levels below the recommended exposure standard.

**PPE**
**Eye / Face**

Wear splash-proof goggles.

**Hands**

Wear PVC or rubber gloves.

**Body**

When using large quantities or where heavy contamination is likely, wear coveralls.

**Respiratory**

Not required under normal conditions of use.


**9. PHYSICAL AND CHEMICAL PROPERTIES**
**9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	OPAQUE COLOURLESS LIQUID
<b>Odour</b>	CHARACTERISTIC BORATE ODOUR
<b>Flammability</b>	NON FLAMMABLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	9.0 to 11.0 (1% solution)
<b>Vapour density</b>	NOT AVAILABLE
<b>Specific gravity</b>	1.15 to 1.17
<b>Solubility (water)</b>	SOLUBLE
<b>Vapour Pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT RELEVANT
<b>Lower explosion limit</b>	NOT RELEVANT
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive Properties</b>	NOT AVAILABLE
<b>Oxidising Properties</b>	NOT AVAILABLE
<b>Odour Threshold</b>	NOT AVAILABLE

**10. STABILITY AND REACTIVITY**

<b>10.1 Reactivity</b>	Carefully review all information provided in sections 10.2 to 10.6.
<b>10.2 Chemical stability</b>	Stable under recommended conditions of storage.
<b>10.3 Possibility of hazardous reactions</b>	Polymerization is not expected to occur.
<b>10.4 Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>10.5 Incompatible materials</b>	Incompatible with combustible materials, and reducing agents (e.g. sulphites).
<b>10.6 Hazardous decomposition products</b>	May evolve toxic gases if heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

#### Information available for the product:

Based on available data, the classification criteria are not met.

#### Information available for the ingredient(s):

Ingredient	Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)
ETHANOLAMINE	1089 mg/kg (rat)	1025 mg/kg (rabbit)	2.45 mg/L/4hrs (rat)

#### Skin

Contact may result in irritation, redness, rash and dermatitis.

#### Eye

Contact may result in irritation, lacrimation, pain and redness.

#### Sensitisation

Not classified as causing skin or respiratory sensitisation.

#### Mutagenicity

Not classified as a mutagen.

#### Carcinogenicity

Not classified as a carcinogen.

#### Reproductive

Not classified as a reproductive toxin.

#### STOT – single exposure

Over exposure may result in irritation of the nose and throat, with coughing.

#### STOT – repeated exposure

Not classified as causing organ damage from repeated exposure.

#### Aspiration

Not classified as causing aspiration.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information provided.

### 12.2 Persistence and degradability

No information provided.

### 12.3 Bioaccumulative potential

No information provided.

### 12.4 Mobility in soil

No information provided.

### 12.5 Other adverse effects

Plant nutrients may be beneficial to plants at low levels, however high levels may cause reduced growth or burns in sensitive species. Excess may be washed through soil to waterways. Nutrients released to waterways may cause algal blooms, with potential for toxic effects on aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Waste disposal

Dispose of to an approved landfill or waste processing site. Contact the manufacturer/supplier for additional information (if required).

#### Legislation

Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None Allocated	None Allocated	None Allocated
14.2 Proper Shipping Name	None Allocated	None Allocated	None Allocated
14.3 Transport hazard class	None Allocated	None Allocated	None Allocated
14.4 Packing Group	None Allocated	None Allocated	None Allocated
14.5 Environmental hazards	No information provided.		
14.6 Special precautions for user			
Hazchem code	None Allocated		

## 15. REGULATORY INFORMATION

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

**Poison schedule**

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Classifications**

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

**Hazard codes**

None allocated.

**Risk phrases**

None allocated.

**Safety phrases**

None allocated.

**Inventory listing(s)**

**AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**

All components are listed on AICS, or are exempt.

**EUROPE: EINECS (European Inventory of Existing Chemical Substances)**

All components are listed on EINECS, or are exempt.

## 16. OTHER INFORMATION

**Additional information**

**EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES:**

Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS #</b>	Chemical Abstract Service number - used to uniquely identify chemical compounds
<b>CNS</b>	Central Nervous System
<b>EC No.</b>	EC No - European Community Number
<b>EMS</b>	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
<b>GHS</b>	Globally Harmonized System
<b>GTEPG</b>	Group Text Emergency Procedure Guide
<b>IARC</b>	International Agency for Research on Cancer
<b>LC50</b>	Lethal Concentration, 50% / Median Lethal Concentration
<b>LD50</b>	Lethal Dose, 50% / Median Lethal Dose
<b>mg/m<sup>3</sup></b>	Milligrams per Cubic Metre
<b>OEL</b>	Occupational Exposure Limit
<b>pH</b>	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
<b>ppm</b>	Parts Per Million
<b>STEL</b>	Short-Term Exposure Limit
<b>STOT-RE</b>	Specific target organ toxicity (repeated exposure)
<b>STOT-SE</b>	Specific target organ toxicity (single exposure)
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines and Poisons
<b>SWA</b>	Safe Work Australia
<b>TLV</b>	Threshold Limit Value
<b>TWA</b>	Time Weighted Average

**Disclaimer**

This document has been prepared by Rural Liquid Fertilisers (RLF), and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue.

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**End of SDS**