SAFETY DATA SHEET
LIQUID BORON

1. Product and Company Identification

Product Code: FGAU026-029
Product Name: LIQUID BORON
Company Name: Stoller Australia
1 Creswell Road
Largs Bay
South Australia 5016
Web site address: www.stoller.com.au
Email address: stoller@stoller.com.au
Emergency Contact: STOLLER PRODUCTION CHEMIST
Contact number: 08 8169-0988
Information: 1800 337-845
Intended Use: For agricultural use only
Synonyms: Chelated micronutrient solution.

2. Hazards Identification

Acute Toxicity: Skin, Category 4
Acute Toxicity: Inhalation, Category 5
Acute Toxicity: Oral, Category 5
Serious Eye Damage/Eye Irritation, Category 2B

GHS Signal Word: **Warning**

GHS Hazard Phrases:
H303 - May be harmful if swallowed.
H312 - Harmful in contact with skin.
H320 - Causes eye irritation.
H333 - May be harmful if inhaled.

GHS Precaution Phrases: GHS Response Phrases:
H360 - May damage fertility. May damage the the unborn child.
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 soap and 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.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P337+313 - If eye irritation persists, get medical advice/attention.
P363 - Wash contaminated clothing before reuse.

GHS Storage and Disposal Phrases: P501 - Dispose of contents/container to ...

Potential Health Effects (Acute and Chronic): Hazards not otherwise classified (HNOC) or not covered by GHS: None.

Inhalation: None.
Skin Contact: May be harmful in contact with skin.
Eye Contact: Causes eye irritation.
Ingestion: Harmful if swallowed.

3. Composition/Information on Ingredients

CAS #	Components (Chemical Name)	Concentration	
10043-35-3	Boric acid	<60.0 %	
141-43-5	Monoethanolamine	<20.0 %	

4. First Aid Measures

Emergency and First Aid Procedures: Consult a physician. Show this safety data sheet to the doctor in attendance.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

In Case of Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Indication of any immediate medical attention and special treatment needed: No data available.

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: NA Method Used: Estimate

Explosive Limits: LEL: N.A. UEL: N.A.

Autoignition Pt: No data.

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: none known.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.
Further information: No data available.

Flammable Properties and Hazards: Sodium oxides.

Hazardous Combustion Products: No data available.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: In case of a large spill, clear the affected area and protect people. Such releases should be responded to by trained personnel using pre-planned procedures. In the event of an incidental release, minimum Personal Protective Equipment must be worn: latex or rubber gloves and rubber boots, goggles or full face-shield and coveralls or long sleeved shirt and pants.

Environmental Precautions: Do not allow to enter drains or waterways.

Steps To Be Taken In Case Material Is Released Or Spilled: It is necessary to contain the spill into the smallest area possible by diking, scooping, etc. and recover the product into an appropriate container, labeling it accordingly. If product is clean, use it as intended following original label directions; should it get contaminated, salvage for proper disposal as waste.
Absorb residual product onto dry carrier such as dirt, sand or any other absorbent material, then collect in covered, labeled containers and dispose of as dry waste in accordance with Federal, State, and Local waste disposal regulations.

7. Handling and Storage

Precautions To Be Taken in Handling: Use with adequate ventilation. Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Empty containers may contain residual liquid or vapors and therefore should be handled the same as full containers.

Precautions To Be Taken in Storing: Inspect all incoming containers before storage to ensure all are properly labeled and not damaged. Keep containers tightly closed when not in use. Store in a cool, dry place, away from direct sunlight, sources of intense heat or where freezing is possible. Store away from food, feed, clothing materials and living quarters. Whenever possible, place chemicals on secondary containers or diked area. Store a maximum of three pails high; do not stack pallets. Store Keylate Micronutrients in fiberglass, polyethylene or polyolefin.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
10043-35-3	Boric acid	No data.	TLV: 2 mg/m³ STEL: 6 mg/m³	No data.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact.
Material: Nitrile rubber Minimum layer thickness: 0.11 mm.
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Other Protective Clothing: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Engineering Controls (Ventilation etc.): General ventilation is usually adequate. Local exhause should be used if needed for safe, comfortable working conditions.
An eye bath and washing facilities should be readily available.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove all dirty or contaminated clothing and wash it before reusing, as well as any other PPE.

Environmental Exposure Controls: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

9. Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Clear, blue No odor.
pH:	8.5-10.5
Melting Point:	N.E.
Boiling Point:	N.E.
Flash Pt:	NA Method Used: Estimate
Evaporation Rate:	No data.
Flammability (solid, gas):	Product is non-flammable.
Explosive Limits:	LEL: N.A. UEL: N.A.
Vapor Pressure (vs. Air or mm Hg):	NE
Vapor Density (vs. Air = 1):	NE
Specific Gravity (Water = 1):	1.307 - 1.347
Density:	11.1 LB/GA
Solubility in Water:	No data.
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	No data.
Decomposition Temperature:	No data.
Viscosity:	No data.

10. Stability and Reactivity

Reactivity:	No data available.
Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	No data available.
Incompatibility - Materials To Avoid:	Strong oxidizing agents.
Hazardous Decomposition or Byproducts:	No data available. In the event of fire: see section 5.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:	Mutagenicity: This product has not been investigated for mutagenic effects. Embryotoxicity: This product has not been investigated for embryotoxic effects. Teratogenicity: This product has not been investigated for teratogenic effects. Reproductive Toxicity: This product has not been investigated for toxic reproductive effects. CAS# 10043-35-3: Acute toxicity, LD50, Oral, Rat, 2660. MG/KG. Result: Gastrointestinal:Hypermotility, diarrhea. Gastrointestinal:Nausea or vomiting. ; Journal of the American Medical Association, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610, Vol/p/yr: 128,266, 1945
Irritation or Corrosion:	No data available.
Symptoms related to Toxicological Characteristics:	No data available.
Sensitization:	The sensitizing properties of this product have not been thoroughly investigated.
Chronic Toxicological Effects:	The toxicological properties of this material have not been fully investigated.
Carcinogenicity/Other Information:	The carcinogenic properties of this product have not been thoroughly investigated. The components of this product are not listed as a carcinogenic by CPDB, IARC, NTP, OSHA, CAL/OSHA and ACGIH.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information:	No environmental impact studies have been performed with this product. The available data on this plant nutrient material does not indicate any undue hazard to the environment under anticipated use and storage. All work practices must be aimed at eliminating environmental contamination. Any waste due to spillage or leakage should be contained and disposed of accordingly, see Section 6 "Accidental Release Measures." Due to its nutritional nature, may cause eutrophication if dicharged in bodies of water.
Results of PBT and vPvB assessment:	No data available.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.

13. Disposal Considerations

Waste Disposal Method:	This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local waste regulatory authority. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Dispose of empty container in a sanitary landfill or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Avoid contaminating water by disposal of equipment wash waters or other product wastes. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.
Trade Name: LIQUID BORON

DOT Hazard Class:

UN/NA Number:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated. Trade Name: LIQUID BORON

UN Number:

Packing Group:

Hazard Class:

IMDG MFAG Number: N/A

IMDG EMS Page:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated. Trade Name: LIQUID BORON

Additional Transport Information: Placards / Markings: N.A.

Emergency Response Guide Number: N.A

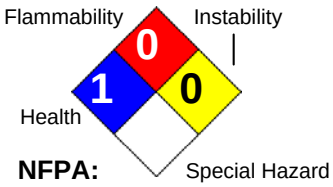
Reportable Quantity: N.A.

15. Regulatory Information

16. Other Information

Revision Date: 28/04/2021

Hazard Rating System:



Additional Information About This Product: No data available.

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