1. Product and Company Identification

Product Code: FGAU015-020
Product Name: FOLI-ZYME
Trade Name: FOLI-ZYME
Company Name: Stoller Australia Pty Ltd
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

2. Hazards Identification

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

GHS Signal Word: **Warning**

GHS Hazard Phrases:
H303 - May be harmful if swallowed.
H312 - Harmful in contact with skin.
H319 - Causes serious eye irritation.

GHS Precaution Phrases:
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.

GHS Response Phrases:
P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P302+350 - IF ON SKIN: Gently 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.
P362+364 - Take off contaminated clothing and wash it before reuse.
P314 - Get medical attention/advice if you feel unwell.
P330 - Rinse mouth.
P391 - Collect spillage.

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

Potential Health Effects (Acute and Chronic):	Acute: Depending on the duration of contact, overexposure can irritate the eyes, skin, mucous membranes and any other exposed tissue.
Inhalation:	Causes respiratory tract irritation.
Skin Contact:	May be harmful if absorbed through skin. May cause skin irritation.
Eye Contact:	Causes eye irritation.
Ingestion:	Harmful if swallowed. May cause irritation of the digestive tract. May cause nausea and vomiting. RTECS: QJ6950000

3. Composition/Information on Ingredients

CAS #	Components (Chemical Name)	Concentration	
10043-35-3	Boric acid	< 0.5 %	
10102-40-6	Sodium molybdate	< 0.05 %	
7447-40-7	Potassium chloride	< 5.0 %	
7646-85-7	Zinc chloride	< 1.5 %	
7773-01-5	Manganese chloride	< 0.5 %	
7786-30-3	Magnesium chloride	<15.0 %	
57-13-6	Urea	<25.0 %	
7447-39-4	Cupric chloride	< 0.3 %	
10124-43-3	Cobalt Sulfate	< 0.05 %	

4. First Aid Measures

Emergency and First Aid Procedures:	Victims of severe exposure to chemicals must be taken to health providing centers for medical attention. Always bring with victim a copy of label and SDS of product to health professional. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
In Case of Inhalation:	Remove from exposure and move to fresh air immediately. If breathing becomes difficult, call a physician. Call a physician if no improvement on patient condition.
In Case of Skin Contact:	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician. Seek medical attention if irritation occurs.
In Case of Eye Contact:	Call a physician if irritation persists. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
In Case of Ingestion:	Drink plenty of water. Call a physician or poison control center immediately for advice on inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person.
Indication of any immediate medical attention and special treatment needed:	Immediately call a POISON CENTER or doctor/physician.
Note to Physician:	Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

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.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.
Further information: The product itself does not burn. No data available.

Flammable Properties and Hazards: Sulphur oxides, Manganese/manganese oxides. Copper oxides.

Hazardous Combustion Products: N.A.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8. Avoid dust formation. Avoid breathing dust.

Environmental Precautions: If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the environment must be avoided. Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Steps To Be Taken In Case Material Is Released Or Spilled: Personal precautions.
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions.
If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the environment must be avoided.
Keep in suitable, closed containers for disposal.

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Precautions To Be Taken in Storing: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry place. Store in a cool, dry place, away from food, feed, clothing materials and living quarters. Whenever possible, place chemicals on secondary containers or diked area. Inspect all incoming containers before storage to ensure all are properly labeled and not damaged. Keep containers tightly closed when not in use.

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.
10102-40-6	Sodium molybdate	PEL: 5 mg/m³ as Mo	TLV: 5 mg/m³ as Mo	No data.
7447-40-7	Potassium chloride	No data.	TLV: 10 mg/m³	No data.

7646-85-7	Zinc chloride	PEL: 1 mg/m3	TLV: 1 mg/m3 STEL: 2 mg/m3	No data.
7773-01-5	Manganese chloride	CEIL: 5 mg/m3	TLV: 0.2 mg/m³ as Mn	No data.
7786-30-3	Magnesium chloride	No data.	No data.	No data.
57-13-6	Urea	No data.	No data.	No data.
7447-39-4	Cupric chloride	No data.	No data.	No data.
10124-43-3	Cobalt Sulfate	No data.	No data.	No data.

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
7646-85-7	Zinc chloride	Australia	TWA: 1 mg/m3 () STEL: 2 mg/m3 () (Fume)	
7773-01-5	Manganese chloride	Australia	TWA: 1 mg/m3 () STEL: () (Total dust)	

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls.

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. Tightly fitting safety goggles. Use full face-shield when there is any likelihood of splashes.

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.

Other Protective Clothing: Complete suit protecting against chemicals. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear long sleeve shirt, long pants, impervious gloves and protective shoes.

Engineering Controls (Ventilation etc.): Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Environmental Exposure Controls: If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the environment must be avoided.

9. Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Clear, yellow to amber in color.
pH:	~ 0.9 - 2.9
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	No data.
Evaporation Rate:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	~ 1.21 - 1.25
Density:	~ 10.3
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:	No data available.
Hazardous Decomposition or Byproducts:	No data available.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information: Moderate eye irritation. Moderate skin irritation.
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
CAS# 7646-85-7: Acute toxicity, LD50, Oral, Rat, 350.0 MG/KG. Result: Gastrointestinal:Nausea or vomiting. Blood:Change in clotting factors. ; Food Research., For publisher information, see JFDSAZ, Champaign, IL, Vol/p/yr: 7,313, 1942

CAS# 57-13-6: Acute toxicity, LD50, Oral, Rat, 8471. MG/KG. Result: Autonomic Nervous System: Other (direct) parasympathomimetic. Behavioral: Coma. Gastrointestinal:Hypermotility, diarrhea. ; Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 51(6),8, 1986

Sensitization: No data available.

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.

Carcinogenicity: NTP? Unknown IARC Monographs? Unknown OSHA Regulated? Unknown

12. Ecological Information

General Ecological Information: No environmental impact studies have been performed with this product. The available data on the ingredients of this plant nutrient product does not indicate any undue hazard to the environment under anticipated use and storage. 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: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. Disposal Considerations

Waste Disposal Method: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Avoid contaminating water by disposal of equipment wash waters or other product wastes.
Contaminated packaging: Observe all federal, state, and local environmental regulations.

US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated. Trade Name: FOLI-ZYME

DOT Hazard Class:

UN/NA Number:

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not Regulated. Trade Name: FOLI-ZYME

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Non-Regulated. Trade Name: FOLI-ZYME

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Non-Regulated. Trade Name: FOLI-ZYME

15. Regulatory Information

16. Other Information

Revision Date: 26/03/2021

Additional Information About This Product: No data available.

Company Policy or Disclaimer: