

## Section 1 – Identification of Material and Producer/Supplier

**Product Name:** LEGUMATE LIQUID  
**Product Use:** Liquid legume microbial inoculant  
**Producer:** Great Southern Biology Pty Ltd  
**Address:** 956 Metry St, North Albury, NSW, 2640  
**Phone:** 0438 031135  
**Website:** www.greatsouthernbiology.com.au  
**Email:** info@greatsouthernbiology.com.au  
**Emergency Telephone Numbers:** Police, Ambulance, Fire: 000 (Mobile 112)  
Poisons Information Centre (Australia) 13 11 26  
Great Southern Biology Mon-Fri 8am – 4pm AEST  
0438 031135 (Australia)  
**Version Date:** July 2025

## Section 2 – Hazards Identification

### Statement of Hazardous Nature

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA  
NOT A DANGEROUS GOOD ACCORDING TO THE ADG CODE, IATA OR IMDG/IMSBC CRITERIA

**Hazard Statement:** Not Hazardous - No criteria found.

**SUSP Classification:** S5  
**ADG Classification:** None allocated. Not a dangerous good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.  
**UN Number:** None allocated.  
**GHS Signal Word:** NONE. Not hazardous.  
**PREVENTION**  
P102: Keep out of reach of children.  
P262: Do not get in eyes, on skin or on clothing.  
P281: Use personal protective equipment as required.  
**RESPONSE**  
P353: Rinse skin or shower with water.  
P301 + P330 + P331: IF SWALLOWED rinse mouth. Do not induce vomiting.  
P370 + P378: Not combustible. Use extinguishing media suited to burning materials.  
**STORAGE**  
P402 + P404: Store in a dry place. Store in a closed container.  
**DISPOSAL**  
Soak up with inert absorbent material (eg: sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled container. Close tightly. Clean contaminated floors and objects thoroughly, observing environmental regulations. Clean with disinfectants.  
**PHYSICAL DESCRIPTION & COLOUR**  
White translucent liquid.  
**ODOUR**  
Odourless  
**MAJOR HEALTH HAZARDS**  
No significant risk factors have been found for this product in normal use.

### Section 3 – Composition / Information on ingredients

Ingredients	Concentration (%)	Concentration (cfu/ml)
Plant extract (powder)	<1%	NA
Catalyst	<1%	NA
Rhizobia culture	<1%	>1x10 <sup>8</sup>
Deionised water	>97%	NA
<b>Total</b>	<b>100%</b>	

This is a commercial product whose exact ratio of components are withheld for proprietary claim which may vary slightly. Minor quantities of other nonhazardous ingredients are also possible.

### Section 4 – First Aid Measures

<b>General Information:</b>	You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.
<b>Inhalation:</b>	No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.
<b>Skin Contact:</b>	Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until removed. Take off contaminated clothing and wash it before reuse. If skin irritation persists get medical advice/attention.
<b>Eye Contact:</b>	Flush eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.
<b>Ingestion:</b>	If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop or if in doubt contact a Poisons Information Centre or doctor.
<b>Advice to Doctor</b>	Treat symptomatically
<b>Medical conditions aggravated by exposure</b>	No information available

### Section 5 – Fire Fighting Measures

<b>Fire and explosion hazards:</b>	This product does not support combustion.
<b>Fire decomposition products:</b>	No known hazardous decomposition products
<b>Extinguishing media:</b>	Not combustible. Use extinguishing media suited to burning materials.
<b>Fire fighting:</b>	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
<b>Flash point:</b>	Does not burn.

**Upper flammability limit:** Does not burn.  
**Lower flammability limit:** Does not burn.  
**Auto ignition temperature:** Not applicable. Does not burn.  
**Flammability class:** Does not burn.

## Section 6 – Accidental Release Measures

**Personal Precautions:** Wear suitable protective clothing.  
**Environmental Precautions:** Do not release into drains or rivers.  
**Accidental release:** For minor spills, clean up, rinsing to sewer and put empty container in garbage. It is good practice to wear impermeable gloves when handling chemical and microbial products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services. Soak up contained materials using sawdust or other approved natural absorption media. This material may be suitable for approved landfill.  
**Containment:** Stop leak if it is safe to do so. Prevent entry into waterways, sewers, basement or confined areas. Spill or leak should be isolated immediately. Keep unauthorised personnel away.

## Section 7 – Handling and Storage

**Handling:** Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and ingestion. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.  
**Storage:** Store in cool, dry area removed from foodstuffs and out of direct sunlight. Ensure containers are labelled, protected from physical damage and sealed when not in use. Store away from farm chemicals e.g. insecticides, fungicides and herbicides. Keep container tightly closed when not in use.  
**Container:** Keep in the original container

## Section 8 – Exposure Controls and Personal Protection

Control parameters

Components	CAS-No	Control parameters	Update	Basis
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*No occupational exposure limits have been established for this product by SWA. This product is not known to contain any components with occupational exposure limits while in liquid form.*

*If, in the unlikely event that the product has been dehydrated to powder form the following standards apply;  
Safe Work Australia Exposure Standard (Nuisance dusts): 8hr TWA = 10 mg/m<sup>3</sup> (measured as inhalable dust).  
New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m<sup>3</sup> (respirable dust).*

**Exposure controls**

<b>Personal protective equipment:</b>	The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: <b>AS/NZS 1715</b> , Protective Gloves: <b>AS 2161</b> , Industrial Clothing: <b>AS2919</b> , Industrial Eye Protection: <b>AS1336</b> and <b>AS/NZS 1337</b> , Occupational Protective Footwear: <b>AS/NZS2210</b> . No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.
<b>Respiratory protection:</b>	Respiratory protection is not required under anticipated circumstances of exposure. When respirators are required use a P2 type canister respirator where high concentrations of airborne mist is present. Provision of eye wash facilities and a safety shower is recommended.
<b>Hand protection:</b>	Wash hands before eating, drinking, smoking or going to toilet, launder protective clothing before re-use.
<b>Eye protection:</b>	Eye protection such as protective glasses or goggles is recommended.
<b>Skin and body protection:</b>	Wear gloves or gauntlets and long sleeves when using this product to protect against skin irritation
<b>General protective measures:</b>	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

## Section 9 – Physical and Chemical Properties

<b>Physical Description &amp; Colour &amp; Odour:</b>	Milky-white translucent fluid
<b>Boiling Point:</b>	100°C
<b>Freezing / Melting Point:</b>	Approx 0°C
<b>Volatiles:</b>	No specific data. Expected to be low at 100°C
<b>Specific Gravity:</b>	1.01
<b>Water Solubility:</b>	Miscible
<b>pH:</b>	6-7 in water
<b>Volatility:</b>	Negligible at normal ambient temperatures
<b>Odour Threshold:</b>	No data
<b>Evaporation Rate:</b>	Not applicable
<b>Coeff Oil/Water</b>	No data
<b>Distribution:</b>	
<b>Viscosity:</b>	30 cps
<b>Auto Ignition Temp:</b>	Not applicable – does not burn
<b>Non-flammables that could contribute unusual hazards to a fire or fire-fighter:</b>	Surfaces covered with this product will become extremely slippery.

## Section 10 – Stability and Reactivity

<b>Reactivity:</b>	This product is unlikely to react or decompose under normal storage conditions.
<b>Conditions to avoid:</b>	Heat, flames, direct sunlight.
<b>Incompatibilities:</b>	Strong oxidisers, caustics, acids, hypochlorites
<b>Fire Decomposition Products:</b>	No hazardous decomposition products are known to occur from this product.
<b>Polymerisation:</b>	This product is a natural polymer and likely to thicken when combined with powders. Likewise it will thin when combined with fresh water.
<b>Reactivity:</b>	Compatible with most commonly used materials.

## Section 11 – Toxicological Information

<b>Target Organs:</b>	There is no data to hand indicating any particular target organs.
<b>Inhalation:</b>	Available data indicates that this product is not harmful.
<b>Skin Contact:</b>	May cause mild irritation but is unlikely to cause anything more than mild transient discomfort.
<b>Eye Contact:</b>	This product may be mildly irritating to eyes but is unlikely to cause anything more than mild transient discomfort.
<b>Ingestion:</b>	May cause mild irritation of the digestive system if large quantities are consumed
<b>Carcinogen Status:</b>	<b>SWA:</b> No significant ingredient is classified as carcinogenic by SWA. <b>NTP:</b> No significant ingredient is classified as carcinogenic by NTP <b>IARC:</b> No significant ingredient is classified as carcinogenic by IARC
<b>Classification of Hazardous Ingredients:</b>	No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

## Section 12 – Ecological Information

<b>Ecotoxicity:</b>	No information available
<b>Persistence/Degradability:</b>	This material is readily biodegradable
<b>Mobility:</b>	No information available
<b>Environmental Fate:</b>	Prevent entry into drains and waterways
<b>Bioaccumulation Potential:</b>	No information available
<b>Environmental Impact:</b>	No data available

## Section 13 – Disposal Considerations

<b>Product:</b>	Dispose in accordance with all local, state/provincial and federal regulations, nothing that the product is biodegradable. it is good practice to wear impermeable gloves when handling chemical and microbial products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services. This material may be suitable for approved landfill.
<b>Contaminated Packaging:</b>	Consult state and local regulations regarding the proper disposal of container.

## Section 14 – Transport Information

<b>UN Number:</b>	This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.
<b>Land Transport (ADG Code):</b>	Not regulated for transport of Dangerous Goods
<b>Air Transport (IATA):</b>	Not regulated for transport of Dangerous Goods
<b>Sea Transport (IMDG Code):</b>	Not regulated for transport of Dangerous Goods

## Section 15 – Regulatory Information

<b>AICIS:</b>	All of the significant ingredients in this formulation are compliant with AICS regulations.
<b>SUSMP Poisons Schedule:</b>	Not scheduled

## Section 16 – Other Information

<b>Acronyms</b>	
<b>ADG Code</b>	Australian Code for the Transport of Dangerous Foods by Road and Rail
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>ASCC</b>	Australian Safety & Compensation Council
<b>CAS Number</b>	Chemical Abstracts Service Registry Number
<b>HAZCHEM Number</b>	Emergency action code of numbers and letters that provide information to emergency services especially fire fighters
<b>IARC</b>	International Agency for Research on Cancer
<b>IATA</b>	International Air Transport Authority
<b>IMDG</b>	International Maritime Dangerous Good
<b>IMSBC</b>	International Maritime Solid Bulk Code
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons

Material Safety Data Sheet  
Product Name: LEGUMATE (Liquid)  
Date of Issue: July 2025



**SWA** Safe Work Australia (formerly ASCC and NOHSC)  
**UN Number** United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This MSDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals – Code of Practice" (July 2020)

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