

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

**Product Name:** LEGUMATE GRANULAR - EF  
**Product Use:** Granular legume inoculant for use in Faba Beans, Peas, Vetch and Lentils  
**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:** Sept 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.

**SUSMP Classification:** Not classified

**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 bag or container.

### DISPOSAL

Sweep up and dispose in normal landfill. Product is non-hazardous.

### PHYSICAL DESCRIPTION & COLOUR

Black powder

### ODOUR

Fermentation characteristics – earthy / musty odour.

### 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)
Rhizobium leguminosarum SRDI969	<1%	>1x10 <sup>9</sup>
Rhizobium leguminosarum WSM4643	<1%	>1x10 <sup>9</sup>
Organic compose granule	<98%	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.
<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, if in doubt contact a Poisons Information Centre or doctor.

### Section 5 – Fire Fighting Measures

<b>Fire and explosion hazards:</b>	Combustible. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.
<b>Fire decomposition products:</b>	No known hazardous decomposition products
<b>Extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
<b>Fire fighting:</b>	If a significant quantity of this product is involved in a fire, call the fire brigade.
<b>Flash point:</b>	600°C
<b>Upper flammability limit:</b>	No data
<b>Lower flammability limit:</b>	600°C
<b>Auto ignition temperature:</b>	600°C

**Flammability class:** Combustible. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.

**Advice for Fire Fighters:** Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use water fog to cool intact containers and nearby storage areas.

## Section 6 – Accidental Release Measures

**Accidental release:** For minor spills, sweep up, rinsing to sewer and put empty bag 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. This material is suitable for approved landfill.

**Environmental precautions** Prevent product from entering drains and waterways.

**Methods and material for containment and cleaning up** If spilt, collect and reuse where possible.

## Section 7 – Handling and Storage

**Handling:** Before use carefully read the product label. Do not remove from packaging until ready to use. Avoid contaminating cultures. 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.

**Storage:** Store in cool, dry area removed from foodstuffs **and out of direct sunlight**. Store within a temperature range of 4-15°C. 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.

## Section 8 – Exposure Controls and Personal Protection

Control parameters

Components	CAS-No	Control parameters	Update	Basis
------------	--------	--------------------	--------	-------

*Exposure limits have not been set by SWA for other ingredients in product. The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. There is a blanket limit of 10mg/m<sup>3</sup> for dusts or mists when limits have not otherwise been established. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, 31<sup>st</sup> March 2012*

<b>Exposure controls</b>	Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.
<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 recommended under non-ventilated conditions. When respirators are required use a P1 type particulate respirator. 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>	Small granules with a musty/earthy odour
<b>Boiling Point:</b>	NA
<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>	0.988
<b>Water Solubility:</b>	Insoluble
<b>pH:</b>	6.0-7.0 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>	NA
<b>Auto Ignition Temp:</b>	Not applicable. Not flammable.
<b>Particle characteristics</b>	Small granules with a polymer coating

## Section 10 – Stability and Reactivity

<b>Reactivity:</b>	Not reactive
<b>Conditions to avoid:</b>	Direct sunlight. High humidity. Temperatures >40°C
<b>Incompatibilities:</b>	Strong oxidisers, caustics, acids, hypochlorites
<b>Fire Decomposition Products:</b>	May evolve carbon oxides and hydrocarbons when heated to decomposition.
<b>Polymerisation:</b>	This product is unlikely to undergo polymerisation processes.
<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>	Prolonged inhalation may lead to respiratory tract irritation. Prolonged and repeated exposure to dusts may result in chronic pulmonary disease. Inhalation may induce asthmatic response in persons with asthma who are sensitive to airway irritants
<b>Skin Contact:</b>	Not classified as an eye irritant however prolonged or repeated exposure may cause irritation, redness and inflammation
<b>Eye Contact:</b>	Prolonged or repeated exposure may cause mechanical irritation
<b>Ingestion:</b>	May cause mild irritation of the digestive system
<b>Carcinogen Status:</b>	Not classified as a carcinogen. However, repeated exposure to dust may result in nasal and paranasal sinus cancers (IARC Group 1). Adverse health effects are usually associated with long-term exposure to high dust levels.
<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

This product is unlikely to adversely affect the environment as it contains naturally occurring ingredients.

## 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.
-----------------	--

**Contaminated Packaging:** Consult state and local regulations regarding the proper disposal of container.

## Section 14 – Transport Information

**UN Number:** None allocated  
**Land Transport (ADG Code):** None allocated  
**Air Transport (IATA):** None allocated  
**Sea Transport (IMDG Code):** None allocated

## Section 15 – Regulatory Information

**AICIS:** All of the significant ingredients in this formulation are compliant with AICS regulations.  
**SUSMP Poisons Schedule:** 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
<b>SWA</b>	Safe Work Australia (formerly ASCC and NOHSC)
<b>UN Number</b>	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

Material Safety Data Sheet  
Product Name: LEGUMATE GRANULAR  
Date of Issue: Sept 2025



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)

Copyright © Great Southern Biology Pty Ltd, July 2025