

Safety Data Sheet

Livin GNP1

SDS No: SDS509/000

Effective Date: 10/10/2024

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Revision no: 000

Product Code: 509000

SECTION 1

COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

Product Name: Livin GNP1
Chemical Identifier: Not applicable
Product Use: Seed Inoculant
Restrictions on use: Agriculture

Supplier: Nutrico SA (Pty) Ltd. (Co. Reg. No. 2003/008663/07)
Cedar Lake Industrial Estate,
1 Harvest Place, Clayville, Olifantsfontein, 1666, Gauteng, RSA
Telephone: (011) 392 4072
Website: www.nutrico.co.za

Emergency Contact Numbers

Griffon Poison Information : +27 82 446 8946
National Poison Information Helpline: +27 (0)861 555 777

SECTION 2

HAZARDS IDENTIFICATION

Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard Classes	Hazard Category	Hazard Statements
Health		
Acute toxicity (oral)	-	-
Acute toxicity (dermal)	-	-
Inhalation	-	-
Skin irritation	-	-
Eye irritation	-	-
Reproductive	-	-
STOT (SE/RE)	-	-
Environmental		
Aquatic (Acute)	-	-
Aquatic (Chronic)	-	-

Label elements: labelling as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard pictograms

None

Signal word – No Signal word

Precautionary statements

P102	Keep out of reach of children.
P260	Do not breathe mist.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/face shield/eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P501	Dispose of the contents/containers in accordance with the current legislation on waste treatment.

Special labelling of certain mixtures: None known

Other hazards: None known

Toxicity: Classification according to GHS: Not classified

SECTION 3
COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Declared Active Ingredients:

Chemical name	CAS No.	EC No.	Conc. %w/w	Classification Regulation (EC) 1272/2008
<i>Bradyrhizobium Japonicum</i>	-	-	-	-

SECTION 4
FIRST AID MEASURES

INHALATION: This product is not classified as an inhalation toxicant, if inhalation toxication occurs, remove victim to fresh air and keep comfortable for breathing.

SKIN: This product is not classified as a skin irritant. If skin irritation occurs, remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap.

EYES: This product is not classified as an eye irritant. If eye irritation occurs, flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing.

INGESTION: Rinse mouth thoroughly with water and give 2 to 3 glasses of water to drink if the person is alert. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IMPORTANT ACUTE EFFECTS: None known

IMPORTANT DELAYED EFFECTS: None known

NOTE TO PHYSICIAN:

This product contains *Bradyrhizobium Japonicum*. Treat symptomatically and supportively

SECTION 5
FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Use carbon dioxide, dry chemical, water fog or foam.
Unsuitable Extinguishing Media:	High volume water jet. Use a water jet only to cool heated containers.
Specific hazards:	Not applicable
Special Fire Fighting Procedures:	Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Keep upwind. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways by run-off from the site
Personal protective equipment:	Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear.

SECTION 6
ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid contact with skin and eyes. Do not breathe in spray mist or fumes. Ventilate area of spill or leak, especially in contained areas
Protective equipment:	Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
Emergency procedures:	Alert firefighting personnel, evacuate unprotected personnel and animals.
Environmental Precautions:	Prevent spilled product from entering sewers, waterways or ground water. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs.
Methods & Materials for Containment:	Contain spilled product by diking area with sand or earth.
Methods & Materials for Clean-up:	Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spill material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

SECTION 7

HANDLING AND STORAGE

HANDLING

Precautions for safe handling: Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

STORAGE

Conditions for safe storage: Keep out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed, in an isolated, dry, cool and well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label

Packaging material: Bladder.

SECTION 8

EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration: No occupational exposure limits have been determined for the significant ingredients in this product.

ENGINEERING CONTROLS: It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator.

Hand Protection: The use of chemically protective gloves is recommended to prevent against skin contact.

Eye Protection: The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection:	Wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.
Emergency eyewash:	Where there is any possibility that a handler's eyes may be exposed to this substance; an eye wash fountain should be provided or appropriate alternative within the immediate work area for emergency use.

SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES

Property	Value/description	Method
Physical state	Liquid	Visual
Colour	Clear	Munsell
Odour	Odourless	Organoleptic
pH	6.5-7.5	
Melting/Freezing point	Not applicable	
Boiling point	Not applicable	
Flash point	Not applicable	
Flammability	Not applicable	
Vapour pressure	Not applicable	
Relative Vapour Density	Not applicable	
Solubility	Water soluble	
n-Octanol/Water partition coefficient	Not applicable	
Auto-ignition temperature	Not applicable	
Decomposition temperature	Not applicable	
Viscosity	Not applicable	
Explosive properties	Not explosive	
Oxidising properties	Not oxidative	

SECTION 10
STABILITY AND REACTIVITY

Chemical Stability:	The product is stable for 6 months when stored below 25 °C.
Reactivity:	None known
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	Extreme cold conditions and extreme heat conditions
Incompatible Materials:	Refer to product label.
Hazardous Decomposition Products:	None known

SECTION 11
TOXICOLOGICAL INFORMATION

GHS Classification: Not classified according to classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Toxicity	Effective dose/ concentration	Value	Species	Method
Acute Oral	LD ₅₀	> 5000 mg/kg	Rat	GHS ATE Classification
Acute Dermal	LD ₅₀	> 5000 mg/kg	Rabbit	
Acute Inhalation	LC ₅₀	> 5.00 mg/L	Rat	
Skin irritation	Not classified as a skin irritant			
Eye damage	Not classified as an eye irritant.			
Skin sensitization	Not classified as a skin sensitizer.			
Respiratory sensitization	Not classified as a respiratory sensitizer.			
Mutagenicity/Genotoxicity:	Not classified as mutagenic toxicant.			
Carcinogenicity	Not classified as carcinogenic toxicant.			
Reproductive toxicity	Not classified as a reproductive toxicant.			
Single target organ toxicity:	Not classified as a single target organ toxicant.			
Chronic effects (e.g developmental)	None known			

SECTION 12
ECOLOGICAL INFORMATION

GHS Classification: This product is not classified as an environment toxicant according to Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008.

Plants: Not determined.

ENVIRONMENTAL EFFECTS

Persistence and degradability: Not determined.

Bio-accumulative Potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: Not determined.

SECTION 13
DISPOSAL CONSIDERATIONS

Waste: Open dumping or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Container: Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and

dispose of through an approved waste dump site, incineration plant or recycling company.
Observe all labelled safeguards until container is destroyed.

SECTION 14

TRANSPORT INFORMATION

UN Number: Not regulated

Road Transport ADR/IRD:

Class: N/A

Packaging group: N/A

UN Proper Shipping Name: N/A

Maritime Transport IMDG/IMO:

Class: N/A

Packaging group: N/A

UN Proper Shipping Name: N/A

Marine Pollutant (Y/N): No.

Air Transport IATA/ICAO:

Class: N/A

Packaging group: N/A

UN Proper Shipping Name: N/A

Special/Environmental Precautions: Sealed bags and packed in boxes.

Transport in bulk (according to MARPOL 73/78, Annex II and the IBC code): Not available.

SECTION 15

REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture: OSHA 1993 Regulations for Hazardous Chemical Substances

Relevant information regarding restrictions: None

EU regulation: Regulation EC1272/2008

Other national regulations: None

Chemical Safety Assessment carried out: No chemical safety assessment was carried out for this Product

SECTION 16

OTHER INFORMATION

PACKAGING: Packaged in various sized bladders and labelled according to South African regulations and guidelines

DISCLAIMER:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.