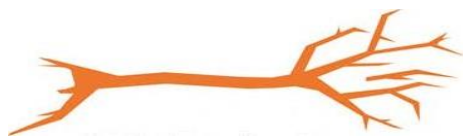


# SAFETY DATA SHEET



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Issued: January 2019

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: Di-Bak Parkinsonia BioHerbicide**

**Full Product Name:** Di-Bak Parkinsonia BioHerbicide.  
**Other Names:** Bio Herbicide.  
**Use:** Bioherbicide for control of *Parkinsonia aculeate* in grazing lands.  
**Company:** Bioherbicide Australia Pty Ltd  
**Address:** Building 8112 and 8113, The University of Queensland, Gatton Campus, Gatton, QLD 4343.  
**ACN/ABN:** 44 147 854 582  
**Telephone Number:** 0402437670  
**Emergency Contact:** 0402 437 670

## SECTION 2 HAZARDS IDENTIFICATION

**Not classified as hazardous according to criteria of Safe Work Australia.  
Not classified as a Dangerous Good according to the ADG Code.**

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients:

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
<i>Macrophomina phaseolina</i> Strain NT094	-	16 cfu
<i>Lasiodiplodia pseudotheobromae</i> Strain NT039	-	16 cfu
<i>Neoscytalidium novaehollandiae</i> Strain QLD003	-	16 cfu
Other ingredients determined not to be hazardous		Balance

(cfu = colony forming units)

## SECTION 4 FIRST AID MEASURES

### FIRST AID

**Ingestion:** If swallowed do NOT induce vomiting. Give a glass of water. Rinse mouth thoroughly with water. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126.

**Eye contact:** Hold eyes open and flood with clean water. Ensure irrigation under eyelids by occasionally lifting them. If irritation persists, seek medical advice.

**Skin contact:** Remove contaminated clothing. Wash skin with water. If skin is irritated, seek medical advice.

**Inhalation:** Remove to fresh air and observe until recovered. If effects persist, seek medical advice. Over-exposure by inhalation is unlikely.

**Advice to Doctor:** Treat symptomatically. Product is unlikely to cause any symptoms or have any detrimental effects.

**SECTION 5 FIRE FIGHTING MEASURES**

**Specific Hazard:** Generally considered a low risk. Product may be combustible if subjected to sustained and continuous exposure to fire.

**Extinguishing media:** Not flammable. Low risk of explosion if involved in a fire. Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff.

**Hazards from combustion products:** Product is likely to decompose if it is burned. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

**SECTION 6 ACCIDENTAL RELEASE MEASURES****Emergency procedures:**

In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum wear elbow-length chemical resistant gloves and goggles. Avoid direct contact with the contents of capsules. Do not wet capsules, as the outer coating will dissolve.

In the case of spillage, stop leak if safe to do so, and contain spill. If possible, capsules should be recovered and used for their intended use. Vacuum or shovel spilled material into an approved container and dispose of waste in compliance with relevant Local, State or Territory government regulations. Keep out animals and unprotected persons.

**Material and methods for containment and cleanup procedures:**

After spills and if capsules have ruptured, wash area preventing runoff from entering drains.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid contact with eyes and skin. When using the product wear elbow-length chemical resistant gloves. Wash hands after use.

**Conditions for Safe Storage:** Not classified as a Dangerous Good by the ADG. This product is not a Scheduled Poison. Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. This is a biological product that can be damaged by heat and should be protected from high temperatures at all times. Product should be stored at less than 30°C. Do not store for prolonged periods in direct sunlight.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines:**

Exposure guidelines have not been established for this product by Safe Work Australia.

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

Keep containers closed when not in use. No special engineering controls are required, however make sure that the work environment remains clean and that vapours and mists are minimised.

**Personal Protective Equipment (PPE):**

General: When using the product wear thin latex gloves. Wash hands after use.

Personal Hygiene: Avoid contact with eyes and skin. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking.



**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear gelatine capsule filled with dark grey cereal grain.
<b>Odour:</b>	No data.
<b>Boiling point:</b>	Not applicable.
<b>Freezing point:</b>	Not applicable.
<b>Specific Gravity:</b>	Not applicable.
<b>Solubility in Water:</b>	Not soluble. Capsule will disintegrate in water.
<b>pH:</b>	7 - 8.
<b>Flammability:</b>	Not flammable.
<b>Flash Point:</b>	Not applicable – not flammable.
<b>Vapour pressure:</b>	No data.
<b>Corrosive hazard:</b>	Not corrosive.
<b>Explosive properties:</b>	Not explosive.
<b>Oxidizing properties:</b>	Not an oxidiser.
<b>Poison Schedule:</b>	This product is not a Scheduled poison.
<b>Formulation type:</b>	Capsule.

**SECTION 10 STABILITY AND REACTIVITY**

**Chemical Stability:** Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

**Conditions to avoid:** DO NOT store for prolonged periods in direct sunlight.

**Incompatible materials:** Water, as water dissolves the capsules.

**Hazardous decomposition products:** This product is likely to decompose only after being exposed directly to fire. Hazardous decomposition products include oxides of carbon.

**Hazardous reactions:** Polymerisation will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

**Potential Health Effects:****ACUTE EFFECTS**

**Swallowed:** Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

**Eye:** This product may cause irritation to the eyes.

**Skin:** Contact with intact skin is unlikely to have any effects.

**Inhaled:** Inhalation of mists or sprays may produce respiratory irritation.

**Long Term Exposure:**

**Chronic toxicity:** All three organisms belong to a fungal family called the *Botryosphaeriaceae* and are native to Australian soils and are also found in soils throughout the world. Their distribution and modes of action are similar. The pathogens used are well known as decomposer organisms in the soil. Like most decomposer organisms the three fungi have very low mammalian toxicity, but they have the potential to cause human infections especially in immune-compromised patients. *Macrophomina phaseolina* is an extremely rare human pathogen although this fungus is very widely distributed in tropical and sub-tropical soils.

*Lasiodiplodia* is widely distributed through the tropics and sub-tropics and can be found as a saprophyte or weak pathogen on many fruits originating from these areas. It is an opportunistic human pathogen but human infections are extremely rare and often follow some trauma or accompany some underlying disease.

There are no records in the literature on human mycoses for *N. novaehollandiae*.



**SECTION 12 | ECOLOGICAL INFORMATION**

**Environmental Toxicology:** No data is available on this product. All three organisms belong to a fungal family called the *Botryosphaeriaceae* and are native to Australian soils and are also found in soils throughout the world. The pathogens used are well known as decomposer organisms in the soil.

**Environmental Fate:** Living fungi are not generally subject to physicochemical breakdown, and when fungi die they become substrate for other fungi and micro-organisms. The capsule will be contained within the target tree and sealed within the tree. Only when the tree dies will the fungi be able to disperse. However, without a ready food source the fungi will eventually die and be attacked by other micro organisms.

**SECTION 13 | DISPOSAL CONSIDERATIONS**

**Spills and Disposal:** Persons involved in cleanup require adequate skin protection - see Section 8. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. Dispose of the drums of wastes, including any decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

**Disposal of empty containers:** Do not dispose of unused product on site. Dispose of unused product in a designated and appropriately labelled biologicals container. Break, crush, or puncture empty packaging and deliver to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty packaging or product.

**SECTION 14 | TRANSPORT INFORMATION**

**Road & Rail Transport:** This product is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road.

**Marine and Air Transport:** Product is not classified as a Dangerous Goods under International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

**SECTION 15 | REGULATORY INFORMATION**

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is not a scheduled poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 68348.

This product is not classified as a Hazardous Substance under the criteria of Safe Work Australia.

This product is not classified as a Dangerous Good according to the ADG Code (7<sup>th</sup> Ed).

This product is not classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

**SECTION 16 | OTHER INFORMATION**

Issue Date: 11 January 2019. Valid for 5 years till 11 January 2024 (First Issue).

Key to abbreviations and acronyms used in this SDS:

ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).

Genotoxic: Capable of causing damage to genetic material, such as DNA.

PPE: Personal protective equipment.

Teratogen: An agent capable of causing abnormalities in a developing foetus.



STEL: Short Term Exposure Limits.

**SECTION 16 | OTHER INFORMATION (Continued)**

TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC)).

**References**

1. "Search Hazardous Substances". HSIS Safe Work Australia website. (2019).
2. "Approved Criteria for Classifying Hazardous Substances" 3<sup>rd</sup> Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

*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 should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.*

*If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.*

End SDS

