

Safety Data Sheet

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY/UNDERTAKING

Product name: DYGALL

CAS-No.: N/A

Molecular Formula: N/A

Supplier: AgBioResearch Ltd

Street Address: 25 McPherson St
Richmond
Nelson
New Zealand

Telephone: +64 27 4 393 340

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Emergency telephone number: NZ 0800 764 766. In Canada dial +1 416 813 5900

2. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended use; Non pathogenic A radiobacter used to protect susceptible plants from Crown Gall

Appearance: Damp, black powder with a slight earthy odour,

CHEMICAL ENTITY	CAS NO	PROPORTION
Agrobacterium radiobacter	-	VLOW
Other ingredients determined not to be hazardous	-	VHIGH
		100%

PROPORTION (% weight per weight): VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW <1

3. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good by NZS 5433:2012 Transport of Dangerous Goods on Land. DYGALL does not trigger any HSNO classifications or controls. No HSNO approval required.

Poisons Schedule (Aust) / Toxic Substance (NZ): None allocated

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or National Poisons Centre (New Zealand) ph. 0800 764 766.

Ingestion: Rinse mouth with water - Give plenty of water to drink. Treat as for soil ingestion. Seek medical advice.

Eye contact: Irrigate with copious quantities of water for 15 minutes. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Skin contact: Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards: Non-combustible solid.

Fire fighting further advice: Not combustible material.

6. ACCIDENTAL RELEASE MEASURES

Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Sweep up, but avoid generating dust. Collect and seal lit properly labelled bags for disposal. High temperatures will kill any released bacteria.

7. HANDLING AND STORAGE

Storage: Store in a cool, dry place and out of direct sunlight. Keep refrigerated at 2-4 C. Do not store part of an opened packet as it may deteriorate through contamination and give poor results.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH).

However, Workplace Exposure Standards for constituents:

	WES-TWA		MES-STEL	
	ppm	mg/m ³	ppm	mg/m ³
Particulates not otherwise specified	-	10	-	-

As published by the New Zealand Occupational Safety and Health Service (OSH).

Workplace Exposure Standard - Time Weighted Average (WES-TWA). The 8-hour time weighted average exposure standard designed to protect the worker from the effects of long-term exposure.

Workplace Exposure Standard - Short-Term Exposure Limit (WES-STEL). The 15 minute average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL not an alternative to the WES-TWA; both short-term and eight-hour, time-weighted average exposures should be determined.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Workplace Exposure

Standards should not be used as fine dividing lines between safe and dangerous concentration of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Engineering measures: IN THE WORKPLACE: Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES (Short), DUST MASK

MANUFACTURE, PACKAGING AND TRANSPORT: Avoid skin and eye contact and the inhalation of dust. Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dusts exist wear dust respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

PREPARATION AND USE OF PRODUCT Avoid eye and repeated or prolonged skin contact. Wash hands after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Damp, black powder with a slight earthy odour.

Solubility: Dispersible in water.

Specific Gravity (20 C)	N Av	Melting Point (C)	N Av
Relative Vapour Density (air=1)	N Av	Boiling Point (C)	N App
Vapour Pressure (20 C)	N App	Decomposition Point (C)	N Av
Flash Point (C)	N App	Sublimation Point	N App
Flammability Limits (%)	N Av	pH	6-7
Auto-ignition Temp (C)	N Av	Viscosity	N App
% Volatile by volume	N Av	Evaporation Rate	N App
Solubility in water (g/L)	N Av		

(Typical values only - consult specification sheet)

N Av = Not Available

N App = Not Available

10. STABILITY AND REACTIVITY

Stability: Exposure to sunlight and the use of equipment or water contaminated with detergents, pesticides or fertilisers can be harmful to Agrobacterium radiobacter. Contamination will affect the effectiveness of the product.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Ingestion: No adverse effects expected.

Eye contact: Exposure to the dust may cause discomfort due to the particulate nature. May cause physical irritation to the eyes.

Skin contact: Contact with skin may result in irritation.

Inhalation: Inhalation of dust may result in respiratory irritation.

Long Term Effects

No information available for the product.

Acute toxicity / Chronic toxicity

No LD50 data available for the product.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Empty product containers should be rinsed clean and disposed of as appropriate for low and high density polyethylene bags. Unused product can be added to soil to dispose of. Refer to Local City, District or Regional Council Waste Management Authority if more information is required.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as a Dangerous Good by NZS 5433:2012 Transport of Dangerous Goods on Land.

Marine Transport

Not classified as Dangerous Goods by the criteria of (The International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

Registered ACVM Act (1997) No. P002560

Poisons Schedule (Aust)/Toxic Substance (NZ): None allocated

16. OTHER INFORMATION

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises all the data of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since AgBioResearch Limited and its agents cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

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

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is available upon request.