

1. PRODUCT & COMPANY IDENTIFICATION

Product Name	BioTreat Tree & Shrub Tablets
Recommended Use	Fertiliser
Suppliers Details	Rainbow & Brown Limited 68 Tallyho Street, Rotorua, New Zealand PO Box 10049, Mail Centre, Rotorua, 3046
Web Address	www.rainbowbrown.co.nz
Email address	mail@rainbowbrown.co.nz
Telephone	(07) 350 2009 (office hours), 0508 299 299 (free phone, office hours)
National Poison Centre	0800 POISON (0800 764 766) (24 hours)
Date of Issue	11 May 2020
Revision Date	20 October 2025
Expiry Date	20 October 2030

2. HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.

EPA Approval No	HSR002571
Hazard Pictograms	
Signal Word	WARNING

GHS Classification & Category	HSNO Classification	Hazard Code	Hazard Statement
Eye irritation, Category 2	6.4A	H319	Causes serious eye irritation
Specific target organ toxicity – single exposure, Category 3	6.9B	H335	May cause respiratory irritation
Prevention Code	Prevention Statement		
P101	If medical advice is needed, have product container or label at hand		
P102	Keep out of reach of children		
P103	Read label before use		
P261	Avoid breathing dust		

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/eye protection.

Avoid contact with eyes and skin. Do not breathe in spray mist. When applying, wear personal protection as described in section 8. Take all reasonable steps to ensure that this product does not cause any significant adverse effects to the environment beyond the application area. Do not apply directly into or onto water.

Response Code	Response Statement
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
First aid measures described in section 4. Contain and collect spillage for disposal.	

Storage Code	Storage Statement
P405	Store locked up

Disposal Code	Disposal Statement
P501	In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Refer to Section 13 of this SDS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%w/w)
Urea formaldehyde	68611-64-3	30-40%
Triple Super phosphate	65996-95-4	10-20%
Superphosphate	8011-76-5	30-40%
Ingredients not contributing the GHS 7 classes including minerals (potassium, magnesium, iron, sulphates)	Mixture	Balance

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

4. FIRST-AID MEASURES

If medical advice is needed, have product container or label at hand. For advice call the National Poisons Centre or a Doctor.

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do so. Continue rinsing. Seek medical advice if irritation persists.
Skin	Wash with plenty of soap and water. Seek medical advice if irritation or rash occurs.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth. Do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766).
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Workplace Facilities	Hand wash facility. Eye wash facility.
Advice to Doctor	Treat symptomatically.
National Poison Centre	0800 POISON (0800 764 766) (24 hours)

Symptoms of Exposure which could occur if this material is not handled in accordance with instructions:

Eye Contact	May cause eye irritation
Skin	No effect anticipated
Ingestion	May cause gastrointestinal irritation
Inhalation	Dusts may cause respiratory irritation

5. FIRE-FIGHTING MEASURES

Extinguishing Media	Water fog, foam, CO ₂ or dry chemical
Fire & Explosion Hazards	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Fire Fighting Instructions	No special measures are required
Hazchem Code	N/A

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of dusts. Work up wind or increase ventilation.
Environmental Precautions	Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.
Clean Up	Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways, crops, sewers contact the local authority. Collect in an appropriate

	sealable container for disposal in an approved landfill.
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7. HANDLING AND STORAGE

Storage	Keep out of reach of children. Store in the original tightly closed container and in a locked, dry, cool area away from foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals.
Handling and Use	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.
REI	None specified (Also refer to Section 15).

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Tolerable Exposure Limit	None established
Workplace Exposure Standards	WES TWA for magnesium oxide = 10mg/m ³ (fume) WES TWA for Ferrous Sulphate Monohydrate = 1mg/m ³
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protection	
Respiratory	NIOSH approved half face mask with organic vapour cartridge and dust/mist prefilter
Skin	Cotton overalls snugly fitting at the neck, wrist and ankle, boots and gloves
Eye	Safety glasses/goggles when applying

Clean protective equipment after use

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	10 gram cylindrical light green tablets
Odour	odourless
Odour Threshold	Property does not apply
pH	Property does not apply
Melting Point/Freezing Point	Property does not apply
Boiling Point	Property does not apply
Flash Point	Property does not apply
Flammability	Non-flammable
Upper/Lower Flammability	Property does not apply
Vapour Pressure	Property does not apply

Vapour Density	Property does not apply
Relative/Specific Gravity	Property does not apply
Water Solubility	Miscible in water
Partition Coefficient: n-octanol/water	Property does not apply
Auto-ignition Temperature	Property does not apply
Decomposition Temperature	Property does not apply
Kinematic Viscosity	Property does not apply
Particle Characteristics	Property does not apply

10. STABILITY & REACTIVITY

Stability	Stable under normal conditions. Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Hazardous Reactions	None known
Incompatibility	Strong acids, bases and oxidisers
Hazardous Decomposition Products	Oxides of carbon and nitrogen, sulphides and ammonia

11. TOXOLOGICAL INFORMATION

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions.

Acute Oral Toxicity	Superphosphate LD50 > 2000 mg/kg
Acute Dermal Toxicity	LD50 > 2000 mg/kg
Acute Inhalation Toxicity	Superphosphate LD50 > 5mg/L (4h)
Skin corrosion/irritation	Not a skin irritant
Serious eye damage/eye irritation	The mixture is considered to be an eye irritant, because some of the ingredients present are considered eye irritants in more concentrated form.
Respiratory or skin sensitisation	The mixture is not considered to be a skin irritant.
Germ Cell Mutagenicity	Information not available
Carcinogenicity	Information not available
Reproductive Toxicity	Information not available
Specific Organ Toxicity – Single exposure	May cause respiratory irritation
Specific Organ Toxicity – Repeated exposure	Information not available

Aspiration Hazard	Information not available
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12. ECOLOGICAL INFORMATION

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

The following information is presented in respect of the active ingredient:	
Ecotoxicity	EC50 for the mixture is > 100 mg/L. Data considered includes: Superphosphate 85.9mg/L (96h, fish), EC50: 1790mg/L (freshwater invertebrates), 87.6mg/L (freshwater algae).
Persistence & Degradability	Information not available
Bioaccumulation	Information not available
Mobility in Soil	No evidence of soil toxicity
Environmental Exposure Limit	Information is not available

13. DISPOSAL CONSIDERATIONS

Product	Dispose of product by using it in accordance with the label. Waste product should be disposed of to a suitable landfill. For disposal of large quantities contact Rainbow & Brown Ltd.
Container	Triple rinse empty container. Dispose of to a suitable landfill. Do not burn. Do not use packaging for any other purpose.

14. TRANSPORT INFORMATION

This product is NOT considered a Dangerous Good

15. REGULATORY INFORMATION

ACVM Registration No.	Exempt from ACVM registration
EPA Approval No	HSR002571
Qualified Person	Not required
Certified Handler	Not required
Workplace Only	No
Location Certificate	Not required
Tracking	Not required
Record Keeping	Not required
Signage	Not required
Emergency Response Plan	Not required

Secondary Containment	Not required
Additional Requirements	Keep Locked Up.

16. OTHER INFORMATION

SDS review Date	20 October 2025
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Glossary

ACVM	Agricultural Compounds and Veterinary Medicines group of the Ministry of Primary Industries
DT₅₀	Time (days) for 50% reduction in concentration
EC₅₀	Concentration required to produce an effect in 50% of organisms
Environmental Exposure Limit	Maximum concentration limit of a substance in an environmental medium e.g. water, soil.
EPA Notice	Hazardous Property Controls Notice 2017
ERP Guide	Dangerous Goods – Initial Emergency Response Guide SNZ HB
GHS	Globally Harmonised System
HSNO	Hazardous Substances & New Organisms Act
Koc	Organic carbon partition coefficient
LFL	Lower Flammability Limit
LC₅₀	Lethal Concentration in air or water for 50% of test organisms
LD₅₀	Lethal Dose for 50% of test organisms
NOEL	No Observable Effect Level
OSHA	Occupational Safety & Health Administration (USA)
OSH or WorkSafe	WorkSafe New Zealand
PEL	Permissible Exposure Level
Pow	Octanol water partition coefficient (ratio of concentration of a chemical in octanol and water at equilibrium and at a specified temp.)
pH	Measure of acidity/alkalinity of a substance on a 1-14 scale (1=strong acid, 14 = strongly alkali)
STEL	Short Term Exposure Limit
TEL	Tolerable Exposure Limit
TLV	Threshold Limit Value – an exposure limit set by a competent authority
TWA	Time Weighted Average – average concentration of a chemical in air over a total exposure time (usually 8 hours)

UFL	Upper Flammability Limit
WES	Workplace Exposure Standard – set by WorkSafe NZ

Rainbow & Brown Ltd Safety Data Sheet Disclaimer

This Safety Data Sheet has been prepared by Rainbow & Brown Ltd and summarises information on this product and safe handling procedures. The information is based on data provided to Rainbow & Brown Ltd or obtained from third-party sources and represents the current understanding of appropriate safety and handling precautions at the time of issue.

Users must ensure they are working with the most current version of this SDS and should familiarise themselves with both the product label and this document. Each user should consider this information in the context of their specific handling and use of the product, including when used in conjunction with other products.

While Rainbow & Brown Ltd has exercised due care to include accurate and up-to-date information, no warranty is provided as to the accuracy, completeness, or suitability of this information. Users are responsible for determining whether this information is suitable and accurate for their particular purposes and specific applications.

For additional clarification regarding any aspect of the product or to ensure an appropriate risk assessment can be conducted, users should contact Rainbow & Brown Ltd directly or obtain further information from the manufacturer. To the fullest extent permitted by law, Rainbow & Brown Ltd accepts no liability for any loss, injury, or damage (including consequential loss) that may result from reliance on the information contained in this SDS. This information is provided in good faith, but no express or implied warranty is made.