

1. PRODUCT & COMPANY IDENTIFICATION

Product Name	DICAMBA 500 Select
Recommended Use	Herbicide
Suppliers Details	Rainbow & Brown Limited 68 & 68A 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)
Emergency Telephone	0800 CHEMCALL (0800 243 622) (24 hours)
National Poisons Centre	0800 POISON (0800 764 766) (24 hours)
Date of Issue:	23 December 2025
Revision Date:	15 July 2026
Expiry Date	15 July 2031

2. HAZARDS IDENTIFICATION

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

EPA Approval No	HSR000442
Hazard Pictograms	
Signal Word	WARNING

GHS Classification & Category	HSNO Classification	Hazard Code	Hazard Statement
Skin irritation, Category 2	6.3A	H315	Causes skin irritation.
Eye irritation, Category 2	6.4A	H319	Causes serious eye irritation.
Specific target organ toxicity, repeated, Category 2	6.9B	H373	May cause damage to liver through prolonged or repeated exposure.
Hazardous to the aquatic environment, acute, Category 1	9.1A	H400	Very toxic to aquatic life.

Hazardous to the aquatic environment, chronic, Category 1	9.1A	H410	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	9.2A	H421	Very toxic to the soil environment.
Hazardous to terrestrial vertebrates	9.3B	H432	Toxic to terrestrial vertebrates.
Hazardous to terrestrial invertebrates	9.4B	H442	Toxic to terrestrial invertebrates.

Prevention Code	Prevention Statement
P103	Read label before use
P260	Do not breathe fumes, mist, or spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective clothing and equipment as detailed in Section 8.

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
P314	Get medical advice/attention if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before re-use.
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.
P391	Collect spillage.

First aid measures described in section 4. Contain and collect spillage for disposal. In an emergency call 111, Police or Fire Brigade. For specialist advice in an emergency only, call 0800 CHEMCALL (0800 243 6225) (24 hrs).

Storage Code	Storage Statement
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Disposal Code	Disposal Statement
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P501	In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Refer to Section 13 of this SDS.
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%w/w)
Dicamba*	1918-00-9	41 - 43
Other non-hazardous ingredients	Trade secret	1 – 2.5
Water	7732-18-5	Balance to 100

*Present as the dimethylamine salt (CAS No. 2300-66-5)

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

Eye Contact:	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Remove contact lenses after first 5 minutes if present and easy to do, the continue rinsing. Get medical advice/assistance if irritation persists.
Skin:	Remove contaminated clothing. Wash gently and thoroughly with plenty of water (use non-abrasive soap if necessary). Do not scrub the skin. Get medical advice/attention if irritation occurs. Wash contaminated clothing before re-use.
Ingestion:	If swallowed, do NOT induce vomiting. Rinse mouth with water. Contact a Poisons Information Centre or call a doctor.
Inhalation:	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.
General:	Call the National Poisons Centre (0800 POISON, 0800 764 766) for advice if you feel unwell or have been exposed and are concerned. Have product label or SDS at hand.

5. FIRE FIGHTING MEASURES

Flash Point:	Non flammable.
Flammable Limits:	Does not burn. Lower flammability limit: Not applicable. Upper flammability limit: Not applicable.
Extinguishing Media:	Fine water spray, foam, CO2. Do not use strong water jets.

	Use extinguishing media suited to surrounding materials.
Fire & Explosion Hazards:	There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Fire decomposition products from this product are likely to be irritating and harmful if inhaled
Fire Fighting Equipment:	Wear personal protection equipment include SCBA.
Fire Fighting Instructions:	Do not allow runoff into drains.
Hazchem Code:	3Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Clear area of all unprotected personnel. Keep people upwind of fire. Use appropriate protective clothing and equipment.
Spills:	In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. Refer to Section 8 for personal protective equipment. If vapours or mists are likely to build up in the clean-up area, we recommend to use a respirator. Usually, no respirator is necessary when using this product. Stop leak if safe to do so and contain spill. Collect liquid spills. Absorb small spills and residues with sand, vermiculite, or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect contaminated solids into labelled containers for recycling or salvage and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Ensure legality of disposal by consulting regulations prior to disposal.

7. HANDLING AND STORAGE

Label:	Must be under the control of a suitably qualified handler when mixed, loaded or applied. Take all reasonable steps to ensure that the product does not cause any significant adverse effects to the environment beyond the application area. Do not apply product to plants if: (1) Bees are foraging; or (2) The plants are in flower or part flower and are likely to be visited by non-target invertebrate pollinators (including bees).
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Handling:	Read label before use. Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label. Refer to Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling to minimise risks to persons using the product in the workplace. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.
Storage:	Keep out of reach of children. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Keep away from food and feedstuffs. Store in accordance with the current version of NZS8409 Management of Agrichemicals. Storage of 100L or more requires signage, secondary containment and an emergency response plan.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Guidelines:	<table><tr><th>Ingredient</th><th>CAS Number</th><th>TWA (mg/m³)</th><th>STEL (mg/m³)</th></tr><tr><td>Dicamba (as the dimethylamine salt)</td><td>1918-00-9</td><td>Not set</td><td>Not set</td></tr></table>	Ingredient	CAS Number	TWA (mg/m ³)	STEL (mg/m ³)	Dicamba (as the dimethylamine salt)	1918-00-9	Not set	Not set
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	Dicamba (as the dimethylamine salt)	1918-00-9	Not set	Not set					
WorkSafe's 13 th edition of WES and BEI values, published April 2022.									
The WES 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. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated 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.									
Engineering Controls:	No special engineering controls or ventilation requirements are normally necessary for this product. However, make sure that the work environment remains clean, and that vapours and spray mists are minimised.								
Personal Protection:									
Respiratory Protection:	Usually, no respirator is necessary when using this product. However, if you have any doubts refer to standard AS/NZ 1715 for appropriate equipment.								
Skin Protection:	Wear protective clothing such as impervious gloves, waterproof hat, coat and trousers when using. Use impervious elbow-length gloves and facial protection when handling this product. See								

	below for suitable material types. Protective clothing be made from the following materials: rubber, PVC. Refer to Standard AS 2161, AS2919 and AS.NZ2210.
Eye Protection:	Protective glasses or goggles should be worn when this product is being used. Emergency eye wash facilities are also recommended in an area close to where this product is being used. Refer to standard AS.NZ1337.
Dust:	N/A
General advice:	Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used. Do not eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work. Launder contaminated clothing separately from household laundry.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Clear colourless liquid
Odour:	Mild but characteristic odour
Odour Threshold:	No data
pH:	7.0 - 9.0 (neat)
Boiling Point:	Approximately 100°C at 100kPa.
Melting point:	No specific data. Liquid at normal temperatures
Freezing point:	No specific data. Liquid at normal temperatures
Boiling point:	No data
Flash Point:	Non-flammable (FP >93 °C)
Flammability (solid, gas):	Not applicable
Flammability LEL/UEL:	Not applicable
Vapour Pressure:	2.37 kPa at 20°C (water)
Vapour Density:	No data
Relative density:	~ 1.18
Solubility:	Completely soluble in water
Partition coefficient: n-octanol/water:	No data
Autoignition Temperature:	Not available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Particle characteristics:	Not applicable
Volatility:	No data
Volatiles:	Water (~50%)

Evaporation rate:	No data
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10. STABILITY & REACTIVITY

Stability:	Stable under normal conditions.
Reactivity:	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf-life.
Conditions to Avoid:	Exposure to heat, direct sunlight.
Incompatibility:	Strong acids, strong bases, strong oxidising agents.
Hazardous Decomposition Products:	Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Water.
Hazardous Polymerisation:	This product will not undergo polymerisation reactions.

11. TOXOLOGICAL INFORMATION

Acute toxicity	Not classified as being acutely toxic by oral, dermal or inhalation exposure. If inhaled, can cause irritation of the linings of the nasal passages and the lungs, and loss of voice. Symptoms of poisoning with Dicamba include loss of appetite (anorexia), vomiting, muscle weakness, slowed heart rate, shortness of breath, central nervous system effects (victim may become excited or depressed), benzoic acid in the urine, incontinence, cyanosis (bluing of the skin and gums), and exhaustion following repeated muscle spasms. Most individuals who have survived severe poisoning from Dicamba have recovered within 2 to 3 days with no permanent effects.
Skin corrosion/irritation:	Product classified as skin irritant.
Eye damage/irritation:	Product classified as serious eye irritant. Dicamba technical is very irritating and corrosive and can cause severe and permanent damage to the eyes. The eyelids may swell, and the cornea may be cloudy for a week.
Respiratory/skin sensitisation:	Product is not classified as sensitiser.
Mutagenicity:	Product is not classified for mutagenicity.
Carcinogenicity:	Product is not classified for carcinogenicity.

Reproductive Toxicity:	Product is not classified for reproductive or developmental effects.
Specific Target Organ Toxicity:	May cause damage to kidneys and/or liver via ingestion from repeated or prolonged exposure.
Aspiration hazard:	No aspiration hazard identified.
Toxicological data:	Dicamba Rat, Oral LD50 1465 mg/kg Mouse, Oral LD50 1190 mg/kg Rabbit, dermal LD50 2000 mg/kg Rat, inhalation LC50 (4 h) 4.46 mg/L (nose only)

12. ECOLOGICAL INFORMATION

Aquatic environment:	Product is very toxic in the aquatic environment and with long-lasting effects.
Soil environment:	Product is very toxic in the soil environment. Product is used as herbicide.
Terrestrial vertebrates:	Product is toxic to terrestrial vertebrates.
Terrestrial invertebrates:	Product is toxic to terrestrial invertebrates.
Persistence and biodegradability:	Low potential for bioconcentration. Dicamba is moderately persistent in soil. The half-life of Dicamba in soil is typically 1 to 4 weeks. Under conditions suitable for rapid metabolism, the half-life is less than 2 weeks. Metabolism by soil microorganisms is the major pathway of loss under most soil conditions. The rate of biodegradation increases with temperature and increasing soil moisture and tends to be faster when soil is slightly acidic. When soil moisture increases above 50%, the rate of biodegradation declines. In water, microbial degradation is the main route of Dicamba depletion. Photolysis may also occur. Aquatic hydrolysis, volatilization, adsorption to sediments, and bioconcentration are not expected to be significant. Dicamba slowly breaks down in sunlight. Volatilization from soil surfaces is probably not significant, but some volatilization may occur from plant surfaces. It is stable to water and other chemicals in the soil.
Mobility in soil:	Dicamba does not bind to soil particles and is highly soluble in water. It is therefore highly mobile in the soil and may contaminate groundwater. In humid areas, Dicamba will be leached from the soil in 3-12 weeks.
Other adverse effects:	Dicamba is rapidly taken up by the leaves and roots of plants, and it is readily translocated to other plant parts. In some plant species, Dicamba accumulates in the tips of mature leaves. Desirable broadleaf plants such as fruit trees and tomatoes may be harmed during their growth and development stages.

	Residues of Dicamba on treated plants can disappear through exudation from the roots into the surrounding soil, metabolism within the plant, or by loss from leaf surfaces.
Ecotoxicological data:	Dicamba (active) Fish: <i>Danio rerio</i> LC50 (96 h) >98.85 mg/L Aquatic invertebrate: <i>Daphnia magna</i> EC50 (48 h) >41 mg/L Aquatic plant: <i>Lemna gibba</i> EC50 (14 d) 32 mg/L Algae: <i>Pseudokirchneriella subcapitata</i> EC50 (72 h) >87 mg/L Earthworm: <i>Eisensia foetida</i> LC50 (14 d) >1000 mg/kg Bird: <i>Colinus virginianus</i> LD50 188 mg/kg Honey bee: <i>Apis mellifera</i> LD50 (contact) >89.5 µg/bee <i>Apis mellifera</i> LD50 (oral) >89.5 µg/bee

13. DISPOSAL CONSIDERATIONS

Disposal Method:	Product Disposal: Dispose of this product only by using according to the label or at an approved landfill. Avoid contamination of any water supply with product or empty container. Ensure legality of disposal by consulting regulations prior to disposal.
Container Disposal:	Ensure container is completely empty. Triple rinse empty containers before disposal. Recycle through an approved recycling facility or dispose of via an approved waste disposal contractor. Return empty container to an AgRecovery collection point for disposal. If unable to recycle, burn if circumstances, especially wind direction, permit. Otherwise bury in a suitable land fill.



14. TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Dangerous Goods Classification:	3082
Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dicamba 50%)
Class:	9
UN Number:	3082
Packaging group:	III
Hazchem Code	3Z
Marine Pollutant:	Yes

IER Guide	No. 47
IMDG EMS	F-A, S-F

15. REGULATORY INFORMATION

All of the significant ingredients in this formulation are compliant with NICNAS regulations.

ACVM Act 1997 Registration No:	P009919
HSNO Act 1996, Approval No:	HSR000442
Substance description:	Soluble concentrate containing 480 - 500 g/litre dicamba as the dimethylamine salt
Certified Handler:	Not required
Qualified Handler:	Required
Tracking:	Not required
Compliance Certificate:	Not required
Quantity that must be secured:	Not required
Location Certificate	Not required
Emergency Response Plan:	100L
Secondary Containment:	100L
Signage:	100L
Fire Extinguishers:	No fire extinguisher requirement specified.
Record-keeping :	Yes , if 3 kg or more is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with Management o control of the substance must ensure that a written record is kept of each application of the substance.
Training requirements:	All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for the hazards associated with this substance in accordance with Clause 4.5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017. In addition, any person preparing the product for application or applying the product must be a qualified loader, contractor, or person as applicable. Refer to EPA Hazardous Substances (Hazardous Property Controls) Notice 2017 Part 4, Subpart C.
Other regulatory requirements:	The substance must not be applied onto or into water. Take all reasonable steps to ensure that the product does not cause any significant adverse effects to the environment beyond the application area. Do not apply product to plants if – (1) Bees are foraging; or

	(2) The plants are in flower or part flower, and are likely to be visited by non-target invertebrate pollinators (including bees.). Refer to www.epa.govt.nz for HSR000442 controls and Hazardous Substances Property Controls) Notice 2017.
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16. OTHER INFORMATION

Glossary

AEL	Acceptable Exposure Limit
DT₅₀	Time (days) for 50% loss
EC₅₀	Median effective concentration
EEL	Environmental Exposure Limit
EPA	Environment Protection Authority
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

The data in this Safety Data Sheet relates only to this product alone, and not to its use in combination with other substances or products. In such circumstances, assuming the combination is permitted (refer to product labels, and contact manufacturer if in doubt), be guided by the most hazardous of the substances involved and observe the more stringent of all hazard controls applicable to the products used.

SDS Initial Issue Date: 24 November 2021

Further Information: Rainbow & Brown Limited
Toll-Free Phone (0508) 299 299
