Product Name: Sabakem 2,4-DB 500 SC

APVMA Approval No: 95052/144561



Label Name:	Sabakem 2,4-DB 500 SC			
Signal Headings:	CAUTION			
KEEP OUT OF REACH OF CHILDREN				
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING			
Constituent Statements:	500 g/L 2,4-DB (present as the dimethylamine salt)			
Mode of Action:	GROUP 4 HERBICIDE			
Statement of Claims:	For the control of broadleaf weeds in seedling and established lucerne, medic and clover pasture, peanuts and cereal crops undersown with lucerne, medic or clover as specified in the Directions for Use table.			
Net Contents:	5 L - 1000 L			

Restraints:

DO NOT apply if rain is expected within 4 hours.

DO NOT apply to crop or weeds under stress (not actively growing) due to periods of extreme cold or heat, moisture stress (water logged or drought affected), poor nutrition or previous herbicide treatments as increased levels of crop effect and/or reduced levels of weed control may result.

DO NOT use with hard water (>500 ppm) or water containing suspended matter.

Spray drift restraints

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient

in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings 1 to 2 hours before sunset and persist until 1 to 2 hours after sunrise.

Directions for Use:

This section contains file attachment.

Other Limitations:

Withholding Periods:

DO NOT GRAZE OR CUT FOR STOCK FEED FOR 7 DAYS AFTER APPLICATION

Trade Advice:

General Instructions:

GENERAL INSTRUCTIONS

Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions.

MIXING

Mix with the required amount of water in the spray tank or mixing vessel. Apply using a low volume boom spray fitted with fan jets, or by aircraft. Use mains or rain water for mixing. If not available water with a hardness of less than 500 ppm (expressed as calcium carbonate equivalent) can be used but is not preferred. DO NOT tank mix Ammonium sulphate with SABAKEM 2,4-DB 500 SC in hard water for this may cause nozzle blockages.

APPLICATION

Apply using boom or spot spray equipment. Application must be uniform. Nozzle type, output, speed and pressure should be adjusted to deliver a Coarse spray quality in 110-220 litres per hectare by ground application and a minimum of 40 litres of water per hectare by aerial application.

COMPATIBILITY

SABAKEM 2,4-DB 500 SC is compatible with Broadstrike but not for control of Paterson's curse or doublegee - refer to Broadstrike label. The effectiveness of Dimethoate, Le Mat, Imidan and emulsifiable concentrate products including 250 g/L demeton-S-methyl may be reduced by alkaline hydrolysis if tank mixed with this product. For these situations the addition of LI-700 or Acidowett is recommended which should be added to the tank first. The addition of emulsifiable concentrate products containing 471 g/L parrafin oil can improve control of weeds under some conditions, for example moisture stress but may also increase early effects on legumes. When tank mixing add the required amount of compatible product (and surfactant if recommended) when the spray tank is nearly full and while continuously agitating. If left overnight, agitate thoroughly before spraying.

Resistance Warning:

RESISTANT WEEDS WARNING GROUP 4 HERBICIDE

Sabakem 2,4-DB 500 SC is a member of the phenoxys group of herbicides. This product has disruptors of cell growth mode of action. For weed resistance management, Sabakem 2,4-DB 500 SC is a Group 4 herbicide.

Some naturally-occurring weed biotypes resistant to Sabakem 2,4-DB 500 SC and other Group 4 herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These weeds will not be controlled by Sabakem 2,4-DB 500 SC or other Group 4 herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Sabakem Pty Ltd accepts no liability for any losses that may result from the failure of Sabakem 2,4-DB 500 SC to control resistant weeds.

Precautions:

Protections:

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Drift warning: DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants, crops, cropping lands or pastures. Avoid spray drift and vapour movement onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals.

PROTECTION OF LIVESTOCK

SPRAY-GRAZING WARNING: Some pasture weeds can be controlled by Spray-Grazing a combination of herbicide treatment followed by heavy grazing 7-10 days later. Sprayed weeds become more palatable to stock and a higher intake of some weed species after spraying can cause stock deaths and other problems. Increased quantities of poisonous plants may be eaten by stock when the Spray-Grazing technique is being used. Take care if pastures are dominated by Caltrop, Capeweed, Cape Tulip, Paterson's curse (Salvation Jane) or Variegated Thistle. With Paterson's Curse preferably graze stock soon destined for slaughter and avoid extended periods of grazing. Avoid grazing with young or breeding stock. DO NOT graze horses or pigs in Paterson's curse (Salvation Jane) infested pasture.

PROTECTION OF WILDLIFE, FISH CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or watercourses with this product or used containers.

Storage and Disposal:

Store in the closed, original container in a cool well-ventilated area. DO NOT store for prolonged periods in direct sunlight.

Triple-rinse containers before disposal. Dispose of rinsate or any undiluted chemical according to state/territory legislative requirements.

This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate or any undiluted chemical according to state legislative requirements. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately. If not recycling, break, crush or puncture and deliver empty packaging 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, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

Safety Directions:

Poisonous if swallowed. May irritate the eyes and skin. This product is alkaline. Avoid contact with the eyes and skin. DO NOT inhale spray mist. When preparing spray, wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and face shield. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms, and face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing.

' '	ccurs, contact a doctor or Poisons Information Centre. lia: 13 11 26, New Zealand 0800 764 766.
Phone Austra	lia: 13 11 26, New Zealand 0800 764 766.

First Aid Warnings:	

DIRECTIONS FOR USE

Situation & Crop	Weeds Controlled	States	Rate/ha	Critical Comments
Lucerne -seedling and established	Burrs - Bathurst Xanthium spinosum - Californian Xanthium orientale - Noogoora Xanthium strumarium Capeweed Arototheca calendula Charlock Sinapis arvensis Dock (seedlings) Rumex spp Evening primrose Oenothera strica Fat hen Chenopodium album Fumitory Fumaria spp Marshmallow Malva parviflora Mexican poppy Argemone spp Mustards Sisymbrium spp Paterson's curse (Salvation Jane) Echium plantagineum Plantains (Flat weeds) Plantago spp Pricky lettuce Lactuca serriola Shepherd's purse Capsella bursa- pastons Sowthistle Sonchus oleraceus Spiny emex (Doublegee) Emex australis Stinging nettle Urtica urens Thistles - Saffron Carthamus lanatus - Slender Carduus pycnocephalus - Soldier Picnomon acama - Spear Cirsium vulgare - Variegated Silybum marianum Turnip weed Rapistrum rugosum Wild (Mediterranean) turnip Brassica tournefortii Wireweed Polygonum aviculare		1-3.2 L	Spray seedling weeds at the 2-6 leaf stage when seedling lucerne has between 1-8 trifoliate leaves. Use lower end of rate range only for 2-4 leaf weeds under good growing conditions or for spray grazing. Small weeds which have been growing slowly under stress and are therefore physiologically older may not be well controlled. To avoid leaf distortion cut or graze established lucerne before spraying. Unless "Spray-Grazing" DO NOT cut, mow or graze for 4 weeks after application to maximise weed control.

Situation & Crop	Weeds Controlled	States	Rate/ha	Critical Comments
Clover and Medic Pastures, -seedling and established Legumes showing acceptable tolerance Clover - Arrow leaf cvs Cefalu, Zulu II - Balansa cvs Bolta, - Frontier, Paradana - Berseem cv Elite II - Persian cvs Nitro, Lazer, Leeton, Prolific, Shaftal - Rose cv Hykon - Red - Sub cvs Coolamon, Dalkelth, Gosse, Goulburn, Junee, Nungarin, Riverina, Seaton Park, Trikkala, Urana - White cv NuSiral etc Medic - Barrel cv Caliph, Parabinga - Burr (polymorpha) cv Circle valley - Garna cvs Paraponto, Sapo - Murex cv Zodiac - Snail cvs Robinson, Sava Serraella - French cv Erica Sown Pasture containing Clover or Medic	Refer to Weeds Controlled in Lucerne Refer to Weeds Controlled in Lucerne	All states	1-3.2L	Spraying seedling weeds at the 2-6 leaf stage when seedling medic and clover has between 1-8 trifoliate leaves. Use lower end of rate range only for 2-4 leaf weeds under good growing conditions or for spray grazing. Medic and Clover safety SABAKEM 2,4-DB 500 SC may reduce initial vigour of most pasture legumes. Depending on inherent tolerance this may not result in reduced spring growth or seed yield. Tolerance can vary between seasons, legume type and cultivars. Because of the continuing introduction of new pasture legumes and cultivars caution is advised before applying SABAKEM 2,4-DB 500 SC to any new legume. Caution is especially advised if a treated crop is intended for seed production. Application beyond the 8 trifoliate leaf stage can increase the chance of reduced vigour and production. The use of higher rates can also increase vigour reduction. DO NOT exceed 3L/ha when spraying Robinson or Sava snail Medic. Do not exceed 2.5L/ha when spraying Sapo or Paraponto gama medic. DO NOT use on Berseem clover or on Red clover when it is being harvested for seed. Growth of Red clover may be retarded. SABAKEM 2,4-DB 500 SC is unsafe to use on Biserrula, Gland clover, Popany vetch and Orion, Santiago & Serena medic due to the risk of excessive growth and seed. SABAKEM 2,4-DB 500 SC is unsafe to use on chicory and plantain. Apply when clovers or medics are at the 1-8 trifoliate leaf stage. Grass seedlings should have 3 or more leaves. Medic and Clover safety refer to the Critical Comments above.
Sub. clover pasture	Doublegee Emex australis	WA only	1.2 L	Spary when Doublegee has less than 14 leaves; best results are obtained when weed has 6-8 leaves. Clover should have 2-8 trifoliate leaves. DO NOT apply to pastures when one or more false breaks in the season occur, as uneven germination will result. Doublegee which emerge after spraying will not be controlled. Medic and Clover safety refer to the Critical Comments above.

Situation & Crop	Weeds Controlled	States	Rate/ha	Critical Comments
Peanuts - Runner types - Virginia types - Spanish types	 Ipomoea spp including Bellvine Ipomoea plabeia Morning glory Ipomoea purpurea Red convolvulus Ipmoea hederifolia Spiny emex Emex australis Thornapples Datura spp 	Qld only	1.3-1.7L	Apply between 1 and 12 weeks after seedlings have emerged. Use the lower end of the rate range for control of <i>Ipomoea</i> spp weeds only.
Wheat, Barley, Oats, Triticale & Cereal Rye undersown with lucerne, medic or clover	Refer to Weeds Controlled in Lucerne	All states	2.1 to 3.2L	Spray weeds at the 2-6 leaf stage when seedling lucerne, medic and clover has between 1-8 trifoliate leaves. Use lower rate for 2-4 leaf weeds under good growing conditions. Apply to cereals after the "double ridge" stage which is normally through tillering after the main shoot has five leaves until booting (Z15-33). The time to "double ridge" stage will vary depending on growing conditions and variety. Medic and Clover safety refer to the Critical Comments above.
Spot spraying (All situations)			200- 400mL/10 0L water	Use lower rate for easy to kill weeds eg Fat hen or Variegated thistle. For harder to kill weeds eg Capeweed, Marshmallow, use higher rate. Where difficult to wet, hairy or very thick weed populations are present, add Wetter 1000 to the spray mixture at a rate of 65 ml/100L water.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.