

# CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



F.S.A.

# 24DB

## HERBICIDE

**ACTIVE CONSTITUENT: 500 g/L 2,4-DB**  
present as the dimethylamine salt

**GROUP 4 HERBICIDE**

For the control of broadleaf weeds in seedling and established Lucerne, medic and clover pastures, peanuts and cereal crops undersown with Lucerne, medic or clover as specified in the Directions for Use table.

**THIS IS A PHENOXY HERBICIDE THAT CAN CAUSE SEVERE DAMAGE TO NATIVE VEGETATION AND SUSCEPTIBLE CROPS SUCH AS COTTON, GRAPES, TOMATOES, OILSEED CROPS AND ORNAMENTALS.**

**IMPORTANT: READ THIS BOOKLET BEFORE USING THIS PRODUCT**



# DIRECTIONS FOR USE

## Restrains

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.

SITUATION & CROP	WEEDS CONTROLLED	STATE	RATE /ha	CRITICAL COMMENTS
Lucerne, - seedling and established	<p>Amaranths <i>Amaranthus</i> spp</p> <p><b>Burrs</b></p> <ul style="list-style-type: none"> <li>- Bathurst <i>Xanthium spinosum</i></li> <li>- Californian <i>Xanthium orientale</i></li> <li>- Noogoora <i>Xanthium strumarium</i></li> </ul> <p>Capeweed <i>Arctotheca calendula</i></p> <p>Charlock <i>Sinapis arvensis</i></p> <p>Dock (seedlings) <i>Rumex</i> spp</p> <p>Evening primrose <i>Oenothera stricta</i></p> <p>Fat hen <i>Chenopodium album</i></p> <p>Fumitory spp <i>Fumaria</i> spp</p> <p>Marshmallow <i>Malva parviflora</i></p> <p>Mexican poppy <i>Argemone</i> spp</p> <p>Mustards <i>Sisymbrium</i> spp</p> <p>Paterson's curse (Salvation Jane) <i>Echium plantagineum</i></p> <p>Plantains (Flat weeds) <i>Plantago</i> spp</p> <p>Prickly lettuce <i>Lactuca serriola</i></p> <p>Shepherd's purse <i>Capsella bursa pastoris</i></p> <p>Sowthistle <i>Sonchus oleraceus</i></p> <p>Spiny emex (Doublegee) <i>Emex australis</i></p> <p>Stinging nettle <i>Urtica urens</i></p> <p><b>Thistles</b></p> <ul style="list-style-type: none"> <li>- Saffron <i>Carthamus lanatus</i></li> <li>- Slender <i>Carduus pycnocephalus</i></li> <li>- Soldier <i>Picnomon acarna</i></li> <li>- Spear <i>Cirsium vulgare</i></li> <li>- Variegated <i>Silybum marianum</i></li> </ul> <p>Turnip weed <i>Rapistrum rugosum</i></p> <p>Wild (Mediterranean) turnip <i>Brassica tournefortii</i></p> <p>Wireweed <i>Polygonum aviculare</i></p>	All States	1 - 3.2 L	Spray seedling weeds at the 2-6 leaf stage when seedling lucerne has between 1-8 trifoliolate 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	STATE	RATE /ha	CRITICAL COMMENTS
<p><b>Clover and Medic Pastures, - seedling and established</b></p> <p><b>Legumes showing acceptable tolerance</b></p> <p><b>Clover</b></p> <ul style="list-style-type: none"> <li>- Arrow leaf cvs Cefalu, Zulu II</li> <li>- Balansa cvs Bolta, Frontier, Paradana</li> <li>- Berseem cv Elite II</li> <li>- Persian cvs Nitro, Lazer, Leeton, Prolific, Shaftal</li> <li>- Rose cv Hykon - Red</li> <li>- Sub cvs Coolamon, Dalkeith, Gosse, Goulburn, Junee, Nungarin, Riverina, Seaton Park, Trikkala, Urana - White cv NuSiral etc</li> </ul> <p><b>Medic</b></p> <ul style="list-style-type: none"> <li>- Barrel cvs Caliph, Parabinga</li> <li>- Burr (polymorpha) cv Circle valley</li> <li>- Gama cvs Paraponto, Sapo</li> <li>- Murex cv Zodiac</li> <li>- Snail cvs Robinson, Sava <b>Serradella</b></li> <li>- French cv Erica</li> </ul>	Refer to Weeds Controlled in Lucerne	All States	1 - 3.2 L	<p>Spray weeds at the 2-6 leaf stage when seedling medic and clover has between 1-8 trifoliolate leaves. Use lower end of rate range only for 2-4 leaf weeds under good growing conditions or for spray grazing.</p> <p>Medic and Clover safety F.S.A. 24DB Herbicide may reduce initial vigour of most pasture legumes. Depending on inherent tolerance this may not result in reduced spring growth or seed yield.</p> <p>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 F.S.A. 24DB Herbicide to any new legume. Caution is especially advised if a treated crop is intended for seed production.</p> <p>Application beyond the 8 trifoliolate 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.</p> <p>Growth of Red clover may be retarded. F.S.A. 24DB Herbicide is unsafe to use on Biserrula, Gland clover, Popany vetch and Orion, Santiago &amp; Serena medics due to the risk of excessive growth and seed. F.S.A. 24DB Herbicide is unsafe to use on chicory and plantain.</p>
Sown Pasture containing Clover or Medics	Refer to Weeds Controlled in Lucerne	All States	1 - 3.2 L	<p>Apply when clovers or medics are at the 1-8 trifoliolate leaf stage. Grass seedlings should have 3 or more leaves.</p> <p>Medic and Clover safety refer to the Critical Comments above.</p>
Sub. clover pasture	Doublegee <i>Emex australis</i>	WA only	1.2 L	<p>Spray when Doublegee has less than 14 leaves: best results are obtained when weed has 6-8 leaves. Clover should have 2-8 trifoliolate 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.</p> <p>Medic and Clover safety refer to the Critical Comments above</p>

SITUATION & CROP	WEEDS CONTROLLED	STATE	RATE /ha	CRITICAL COMMENTS
Peanuts - Runner types - Virginia types - Spanish types	<i>Ipomoea</i> spp including - Bellvine <i>Ipomoea plebeia</i> - Morning glory <i>Ipomoea purpurea</i> - Red convolvulus <i>Ipomoea hederifolia</i> Spiny emex <i>Emex australis</i> Thornapples <i>Datura</i> sp	Qld only	1.3 - 1.7 L	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 - 3.2 L	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 (Z1533). 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)	Refer to Weeds Controlled in Lucerne		200 - 400 mL / 100 L 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 Chemwet 1000 to the spray mixture at a rate of 65 mL / 100 L water.

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

#### WITHHOLDING PERIODS:

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

### GENERAL INSTRUCTIONS

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

#### SPRAY APPLICATIONS AND DRIFT RISK ASSESSMENT

DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour (ground application) as measured at the application site.

DO NOT apply when wind speed is less than 3 or more than 15 kilometres per hour (aerial application) as measured at the application site.

USE ONLY COARSE or larger spray quality according to the ASAE S572 definition for standard nozzles.

For aerial application it is recommended where possible for this product to be applied by an aerial applicator business that holds current accreditation for the Aerial Improvement Management System – "AIMS", issued by the Aerial Agricultural Association of Australia Ltd.

#### Checklist:

- Have you cleaned/decontaminated your boom sprayer?
- Have you contacted your neighbour prior to spraying?
- Is your sprayer set-up correctly for the particular application?
- Check – boom calibration
- At nozzle – nozzle choice
- Low drift/what spray quality
- Coarse or larger spray quality?
- Boom height – speed of intended application
- Water volume
- You must check, determine and record the weather conditions immediately prior to, and immediately after the spray application is made.
- Record – Temperatures
- Relative Humidity
- Delta T
- Wind Speed
- Is there a temperature inversion
- Night spraying – Extra care is required to ensure that inversion conditions are not present.

Use smoke generator to determine wind direction and presence of inversion conditions.

For Further information contact Four Seasons Agribusiness Pty Ltd and consult [spraywisecisions.com.au](http://spraywisecisions.com.au) – this is an online weather forecasting program and is recommended for use when planning your pesticide application.

When spraying in or near a cotton area, check online at [cottonmap.com.au](http://cottonmap.com.au) for the proximity of cotton fields.

**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 F.S.A. 24DB Herbicide 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 (ASAE S 527) in 110- 220 litres per hectare by ground application and a minimum of 40 litres of water per hectare by aerial application.

#### RESISTANT WEEDS WARNING

GROUP	<b>4</b>	HERBICIDE
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F.S.A. 24DB Herbicide is a member of the Phenoxy group of herbicides. F.S.A. 24DB Herbicide has the disruptors of plant cell growth mode of action. For weed resistance management F.S.A. 24DB Herbicide is a Group 4 herbicide. Some naturally-occurring weed biotypes resistant to F.S.A. 24DB Herbicide and other disruptors of plant cell growth 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 resistant weeds will not be controlled by F.S.A. 24DB Herbicide or other disruptors of plant cell growth herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Four Seasons Agribusiness Pty Ltd accepts no liability for any losses that may result from the failure of F.S.A. 24DB Herbicide to control resistant weeds.

#### PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Drift Warning: DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop 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 waterways with this product or used containers.

## STORAGE AND DISPOSAL

Keep out of reach of children.

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. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

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.

**Refillable containers:** Empty contents fully into application equipment. Close all valves and return to [point of supply/designated collection point/other specific collection details] for refill or storage.

## 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.

## FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

## SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet (SDS).

## CONDITIONS OF SALE

The sale, supply, storage, use and application of this product is beyond the control of the manufacturer, and, subject to this provision, all warranties, conditions, rights and remedies express or implied under common law, statute or otherwise, in relation to the sale, supply, storage, use or application are excluded. Four Seasons Agribusiness Pty Limited and its associated entities shall not accept any liability whatsoever (including consequential loss) or however arising (including negligence) for any damage, injury or death connected with the sale, supply, storage, use or application of this product except for liability which cannot be excluded by statute.

**Causes serious eye irritation. Toxic to aquatic life with long lasting effects. Do not eat, drink or smoke when using this product. Avoid release to the environment. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice. Collect spillage. Not combustible. Use extinguishing media suited to burning material.**



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**IN AN EMERGENCY,  
DIAL 000,  
POLICE OR FIRE BRIGADE**