

2,4-D new instructions for use - SPRAY DRIFT RISK MITTIGATION

These new instructions will implement downwind mandatory no spray zones aquatic and terrestrial areas and several advisory instructions for use in cereals, pasture and fallow situations between October and April (Summer spraying).

These new instructions have been developed in consultation with State and Territory government authorities and user groups.

Directions for use:-

As an outcome of the 2018 2,4-D Environmental Assessment report, several recommendations are made to ensure that 2,4-D products continue to be used in a manner that is safe for the animals, plants and the environment. The downwind mandatory no spray zones refer to specific product groupings and in these cases, the following table provides a summary of group numbers and 2,4-D concentrations and forms in the respective group:

1. USERS must first identify which group their product belongs to by identifying the Active Constituent and concentration of the product they intend to use from the product label.

Company X

Amine 625 Selective Herbicide

ACTIVE CONSTITUENT: 625 g/L 2,4-D present as the dimethylamine and diethanolamine salts

For the control of broadleaf weeds in fallow before direct drilling or sowing of cereals and pastures; and in cereal crops, pastures, sugar cane, peanuts and non-agricultural areas as per the Directions for Use.

This is a PHENOXY HERBICIDE that can cause severe damage to susceptible crops such as cotton, grapes, tomatoes, oilseed crops and ornamentals

IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USING THIS PRODUCT

From the example below the product Active constituent are **dimethylamine and diethanolamine salts**
The Concentration is **625 g/L**

2. Determine the product group from **Table 1** below:
The corresponding product group for this product is **Group 9**
3. Apply the **Downwind mandatory no spray zone** for ground and aerial application that correspond to the identified product group for the rate of product being applied

Table 1: Summary of 2,4-D product groupings

| Group | 2,4-D form | Conc (g/L) | Active 2 | Conc (g/L) | Active 3 | Conc (g/L) |
|-------|--|------------|------------|------------|----------|------------|
| 1 | ISOPROPYLAMINE salt | 225 | | | | |
| 2 | ISOPROPYLAMINE salt | 300 | | | | |
| 3 | ISOPROPYLAMINE salt | 450 | | | | |
| 4 | TRIISOPROPANOLAMINE salt | 300 | Picloram | 75 | | |
| 5 | DIMETHYLAMINE salt | 500 | | | | |
| 6 | DIMETHYLAMINE salt | 625 | | | | |
| 7 | DIMETHYLAMINE salt | 800 | | | | |
| 8 | DIMETHYLAMINE salt | 720 | | | | |
| 9 | DIMETHYLAMINE/ DIETHANOLAMINE salts | 625 | | | | |
| 10 | DIMETHYLAMINE/DIETHANOLAMINE salts | 475 | | | | |
| 11 | DIETHANOLAMINE salt | 500 | | | | |
| 12 | DIETHANOLAMINE/TEA salt | 500 | | | | |
| 13 | form not specified | 300 | | | | |
| 14 | SODIUM salt | 700 | | | | |
| | SODIUM salt | 800 | | | | |
| 15 | SODIUM salt | 22.8 | | | | |
| | DIMETHYLAMINE salt | 100 | | | | |
| 16 | DIMETHYLAMINE/DIETHANOLAMINE salts | 80 | Mecoprop | 336 | Dicamba | 40 |
| | DIETHANOLAMINE salt | 350 | Clopyralid | 45 | Dicamba | 45 |
| 17 | ETHYLHEXYL ESTER | 577 | loxynil | 100 | | |
| 18 | ETHYLHEXYL ESTER | 600 | | | | |
| 19 | ETHYLHEXYL ESTER | 680 | | | | |
| 20 | ETHYLHEXYL ESTER | 421 | | | | |
| 21 | ETHYL ESTER OR IOSBUTYL ESTER | 800 | | | | |

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.

RESTRAINTS

DO NOT 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 tables 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 to pastures by air.

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

DO NOT apply unless the wind speed is between 3 and 15 kilometres per hour at the application site during the time of application.

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

Recognising a surface temperature inversion

A surface temperature inversion is likely to be present if:

- Mist, fog, dew or a frost have occurred
- Smoke or dust hangs in the air and moves sideways, just above the ground surface
- Cumulus clouds that have built up during the day collapse towards evening
- Wind speed is constantly less than 11 km/hr in the evening and overnight
- Cool off-slope breezes develop during the evening and overnight
- Distant sounds become clearer and easier to hear
- Aromas become more distinct during the evening than during the day.

Information from GRDC Fact Sheet: 'Surface Temperature Inversions and Spraying', Jul 2014.

Spray timing

- Spray during the day wherever possible. Vertical mixing of the air makes surface temperature inversions unlikely and will reduce the risk of drift caused by surface temperature inversions.
- There is a very low risk of surface temperature inversion when there is full cloud cover and/or the wind speed is continuously greater than 11 km/hr.
- A lack of suitable weather conditions for spraying over extended periods is not an excuse for spraying in unsuitable conditions.

DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions.

DO NOT apply with spray droplets smaller than VERY COARSE spray droplets according to the ASAE S572 definition for standard nozzles.

DO NOT use if rain is likely within 6 hours.

Monitoring and record keeping

Users of this product **MUST** make an accurate written record of the details of each spray application within 24 hours following application and KEEP this record for a minimum of 2 years. The spray application details that must be recorded are: 1- date of use with start and finish times of application; 2- the specific location which must include address and paddock/s sprayed; 3- Product trade name (full name) of the product being used; 4- rate of application which must include the amount of product used per hectare and number of hectares applied to; 5- situation, crop or commodity to which the chemical was applied; 6- wind speed and direction during application; 7- air temperature and relative humidity during application; 8- nozzle brand, model, size, type, and spray system pressure measured during application; 9- height of spay boom from ground ; 10- name and contact details of person applying this product (Additional record keeping and/or details may be required by the state or territory where this product is used).

Watch for changes in weather conditions. Stop spraying immediately if a surface temperature inversion occurs or if spraying conditions become unsuitable for any other reason.

ADVISORY FOR USE IN CEREALS, FALLOW AND PASTURE 1ST OCTOBER TO 15 APRIL

USE IN CEREALS, FALLOW AND PASTURES DURING THE PERIOD 1ST OCTOBER TO 15TH APRIL, IT IS ADVISED TO:-

USE 04 OR BIGGER TTI OR EQUIVALENT NOZZLES THAT PRODUCES **EXTREMELY COARSE (XC) TO ULTRA COARSE (UC) DROPLETS.**

USE HIGHER WATER RATES PER HA, TO GIVE BETTER EFFICACY.

USE SLOWER APPLICATION SPEEDS TO ALLOW OPERATORS TO LOWER BOOM HEIGHTS.

INCREASING DROPLET SIZE AND WATER RATES WHILE REDUCING APPLICATION SPEED WILL ASSIST IN MITIGATING OFF TARGET INVERSION DRIFT DURING SUMMER SPRAYING. EXTREMELY COARSE DROPLETS WILL PRODUCE <3% DRIFTABLE DROPLETS.

BOOM SPRAYERS

DO NOT apply by a boom sprayer unless the following requirements are met:

- spray droplets not smaller than a VERY COARSE (VC) spray droplet size category (minimum XC between 1 October and 15 April - advisory)
- boom heights 0.5 metres or lower above the target canopy (The higher of either the crop canopy or the targeted weeds)
- minimum distances between the application site and downwind sensitive aquatic and wetland areas including aquacultural ponds, surface streams and rivers (see Aquatic 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom sprayers') are observed.
- minimum distances between the application site and downwind sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat (see

Terrestrial 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom sprayers') are observed.

BUFFER ZONES FOR BOOM SPRAYERS:

Group 2 (300 g 2,4-D/L as the IPA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 2.5 L (750 g ae/ha) | 10 metres | 10 metres |
| Up to 2.9 L (880 g ae/ha) | 15 metres | 15 metres |
| Up to 3.5 L (1080 g ae/ha) | 20 metres | 20 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 3.5 L (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 7.3 L (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 7.5 L (2250 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 6.6 L (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 9.1 L (2750 g ae/ha) | 40 metres | 35 metres |

Group 3 (450 g 2,4-D/L as the IPA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.7 L (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.9 L (880 g ae/ha) | 15 metres | 15 metres |
| Up to 2.3 L (1080 g ae/ha) | 20 metres | 20 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 2.4 L (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 4.9 L (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 5 L (2250 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 4.4 L (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 6.1 L (2750 g ae/ha) | 40 metres | 35 metres |

Group 4 (300 g 2,4-D + 75 g Picloram/L as the Triisopropanolamine salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.1 L (325 g ae/ha) | 0 metres | 0 metres |
| Dryland cropping: summer cereals | | |
| Up to 500 mL + 280 mL 24D Amine 625 (325 g ae/ha) | 0 metres | 0 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 0.7 L + 1 L 24D Amine 500 (710 g ae/ha) | 10 metres | 10 metres |
| Up to 1.5 L + 1 L 24D Amine 500 (950 g ae/ha) | 15 metres | 15 metres |
| Up to 2.4 L (1080 g ae/ha) | 20 metres | 20 metres |

| Pasture | | |
|---------------------------|-----------|-----------|
| Up to 15 L (4500 g ae/ha) | 70 metres | 65 metres |

Group 5 (500 g 2,4-D/L as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.5 L (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.7 L (880 g ae/ha) | 15 metres | 15 metres |
| Up to 2.1 (1080 g ae/ha) | 20 metres | 20 metres |
| Dryland cropping: summer cereals | | |
| Up to 1.2 L (560 g ae/ha) | 5 metres | 0 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 2.2 L (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 4.4 L (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 4.5 L (2250 g ae/ha) | | |
| Pasture | | |
| Up to 4.0 L (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 5.5 L (2750 g ae/ha) | 40 metres | 35 metres |
| Up to 6.6 L (3300 g ae/ha) | 45 metres | 45 metres |

Group 6 (625 g 2,4-D/L as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.2 L (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.4 L (880 g ae/ha) | 15 metres | 15 metres |
| Up to 1.7 L (1080 g ae/ha) | 20 metres | 20 metres |
| Dryland cropping: summer cereals | | |
| Up to 0.9 L (560 g ae/ha) | 5 metres | 0 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 1.7 L (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 3.5 L (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 3.6 L (2250 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 3.2 L (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 4.4 L (2750 g ae/ha) | 40 metres | 35 metres |
| Up to 5.3 L (3300 g ae/ha) | 45 metres | 45 metres |

Group 7 (800 g 2,4-D/kg as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 0.9 kg (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.1 kg (880 g ae/ha) | 15 metres | 15 metres |
| Up to 1.3 kg (1080 g ae/ha) | 20 metres | 20 metres |
| Dryland cropping: summer cereals | | |

| | | |
|--|-----------|-----------|
| Up to 0.7 kg (560 g ae/ha) | 5 metres | 0 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 1.4 kg (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 2.8 kg (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 1.4 kg (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 2.8 kg (2220 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 2.5 kg (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 3.4 kg (2750 g ae/ha) | 40 metres | 35 metres |

Group 8 (720 g 2,4-D/L as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|--|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.1 L (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.2 L (880 g ae/ha) | 15 metres | 15 metres |
| Up to 1.5 L (1080 g ae/ha) | 20 metres | 20 metres |
| Dryland cropping: summer cereals | | |
| Up to 0.8 (560 g ae/ha) | 5 metres | 0 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 1.5 L (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 3.0 L (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 3.2 L (2250 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 2.8 L (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 3.8 L (2750 g ae/ha) | 40 metres | 35 metres |
| Up to 4.6 L (3300 g ae/ha) | 45 metres | 45 metres |

Group 9 (625 g 2,4-D/L as the DMA/DEA salts):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|--|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.2 L (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.4 L (880 g ae/ha) | 15 metres | 15 metres |
| Up to 1.7 L (1080 g ae/ha) | 20 metres | 20 metres |
| Dryland cropping: summer cereals | | |
| Up to 0.9 L (560 g ae/ha) | 5 metres | 0 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 1.8 L (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 3.5 L (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 3.6 L (2250 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 3.2 L (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 4.4 L (2750 g ae/ha) | 40 metres | 35 metres |
| Up to 5.3 L (3300 g ae/ha) | 45 metres | 45 metres |

Group 10 (475 g 2,4-D/L as the DMA/DEA salts):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|--|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.6 L (750 g ae/ha) | 10 metres | 10 metres |
| Tropical & subtropical uses: Sugar cane | | |
| Up to 2.3 L (1100 g ae/ha) | 20 metres | 20 metres |
| Up to 4.6 L (2200 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 2.3 L (1100 g ae/ha) | 20 metres | 20 metres |
| Up to 4.75 L (2250 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 5.7 L (2710 g ae/ha) | 40 metres | 35 metres |

Group 11 (500 g 2,4-D/L as the DEA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|--|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.5 L (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.7 L (880 g ae/ha) | 15 metres | 15 metres |
| Up to 2.1 L (1080 g ae/ha) | 20 metres | 20 metres |
| Dryland cropping: summer cereals | | |
| Up to 1.2 L (560 g ae/ha) | 5 metres | 0 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 2.0 L (1080 g ae/ha) | 20 metres | 20 metres |
| Up to 4.4 L (2220 g ae/ha) | 35 metres | 30 metres |
| Tropical & subtropical uses: Peanuts | | |
| Up to 4.5 L (2250 g ae/ha) | 35 metres | 30 metres |
| Pasture | | |
| Up to 4.0 L (2000 g ae/ha) | 30 metres | 30 metres |
| Up to 5.5 L (2750 g ae/ha) | 40 metres | 35 metres |

Group 13 (300 g 2,4-D/L, form not specified):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---------------------------|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Pasture | | |
| Up to 10 L (3000 g ae/ha) | 40 metres | 40 metres |

Group 14a (700 g 2,4-D/kg as the Sodium salt):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|--|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.1 kg (750 g ae/ha) | 10 metres | 10 metres |
| Up to 1.6 kg (1120 g ae/ha) | 20 metres | 20 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 5.2 kg (3640 g ae/ha) | 50 metres | 50 metres |

| | | |
|-----------------------------|-----------|-----------|
| Pasture | | |
| Up to 2.7 kg (1890 g ae/ha) | 30 metres | 30 metres |

Group 14b (800 g 2,4-D/kg as the Sodium salt):

| | | |
|--|----------------------------------|-------------|
| Application rate (/ha) | Downwind mandatory no spray zone | |
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 1.4 kg (1120 g ae/ha) | 20 metres | 20 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 4.5 kg (3640 g ae/ha) | 50 metres | 50 metres |
| Pasture | | |
| Up to 1.4 kg (1120 g ae/ha) | 20 metres | 20 metres |

Group 16a (80 g 2,4-D/L as the DMA/DEA salts + 336 g/L Mecoprop + 40 g/L Dicamba):

| | | |
|--------------------------------|----------------------------------|-------------|
| Application rate (/ha) | Downwind mandatory no spray zone | |
| | Aquatic | Terrestrial |
| Turf | | |
| Up to 25 mL/10 L (336 g ae/ha) | 0 metres | 0 metres |

Group 16b (350 g 2,4-D/L as the DEA salt + 45 g/L Clopyralid + 45 g/L Dicamba):

| | | |
|---------------------------------|----------------------------------|-------------|
| Application rate (/ha) | Downwind mandatory no spray zone | |
| | Aquatic | Terrestrial |
| Turf | | |
| Up to 4.5 L/10 L (1575 g ae/ha) | 25 metres | 25 metres |

Group 17 (577 g 2,4-D + 100 g Ioxynil/L as EHE):

| | | |
|--|----------------------------------|-------------|
| Application rate (/ha) | Downwind mandatory no spray zone | |
| | Aquatic | Terrestrial |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 0.75 L (433 g ae/ha) | 0 metres | 10 metres |
| Up to 2.0 L (1150 g ae/ha) | 20 metres | 30 metres |

Group 18 (600 g 2,4-D/L as EHE):

| | | |
|---|----------------------------------|-------------|
| Application rate (/ha) | Downwind mandatory no spray zone | |
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 260 mL (155 g ae/ha) | 0 metres | 0 metres |
| Up to 930 mL (560 g ae/ha) | 5 metres | 15 metres |
| Dryland cropping: Preparatory spray and harvest aid application | | |
| Up to 1.9 L (1140 g ae/ha) | 20 metres | 30 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 2.7 L (1620 g ae/ha) | 30 metres | 40 metres |
| Pasture | | |
| Up to 5.3 L (3180 g ae/ha) | 45 metres | 95 metres |
| Up to 7.5 L (4500 g ae/ha) | 70 metres | 160 metres |
| Horticultural, non-orchard uses: Potatoes | | |
| Up to 1.3 L (780 g ae/ha) | 10 metres | 25 metres |
| Up to 2.7 L (1620 g ae/ha) | 30 metres | 40 metres |

Group 19 (680 g 2,4-D/L as EHE):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|--|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 230 mL (155 g ae/ha) | 0 metres | 0 metres |
| Up to 820 mL (560 g ae/ha) | 5 metres | 15 metres |
| Dryland cropping: Preparatory spray and harvest aid application | | |
| Up to 1.7 L (1140 g ae/ha) | 20 metres | 30 metres |
| Tropical & subtropical uses: Sugarcane | | |
| Up to 2.4 L (1620 g ae/ha) | 30 metres | 40 metres |
| Pasture | | |
| Up to 4.7 L (3180 g ae/ha) | 45 metres | 95 metres |
| Up to 6.6 L (4488 g ae/ha) | 70 metres | 160 metres |
| Horticultural, non-orchard uses: Potatoes | | |
| Up to 1.15 L (780 g ae/ha) | 10 metres | 25 metres |
| Up to 2.4 L (1620 g ae/ha) | 30 metres | 40 metres |

Group 20 (421 g 2,4-D/L as EHE):

| Application rate (/ha) | Downwind mandatory no spray zone | |
|---|----------------------------------|-------------|
| | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | |
| Up to 250 mL (105 g ae/ha) | 0 metres | 0 metres |
| Up to 500 mL (210 g ae/ha) | 0 metres | 0 metres |
| Up to 900 mL (380 g ae/ha) | 0 metres | 5 metres |

Aerial application

DO NOT apply by aerial application unless the following requirements are met:

- spray droplets not smaller than a VERY COARSE (VC) spray droplet size category
- release heights 3 metres or lower above the target canopy
- minimum distances between the application site and downwind sensitive aquatic and wetland areas including aquacultural ponds, surface streams and rivers (see Aquatic 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom sprayers') are observed.
- minimum distances between the application site and downwind sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat (see Terrestrial 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom sprayers') are observed.

Aerial application should not be used between 1 October and 15 April.

BUFFER ZONES FOR AIRCRAFT:**Group 2 (300 g 2,4-D/L as the IPA salt):**

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 2.5 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 2.9 L (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 3.5 L (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 7.3 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 7.5 L (2250 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 3 (450 g 2,4-D/L as the IPA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.7 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.9 L (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 2.3 L (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 4.9 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 5 L (2250 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 4 (300 g 2,4-D + 75 g Picloram/L as the Triisopropanolamine salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.0 L (325 g ae/ha) | 40 metres | 40 metres | 40 metres | 40 metres |
| Dryland cropping: summer cereals | | | | |
| Up to 500 mL + 280 mL 24D Amine 625 (325 g ae/ha) | 40 metres | 40 metres | 40 metres | 40 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 0.7 L + 1.0 L 2,4-D 500 g/L (710 g ae/ha) | 70 metres | 70 metres | 70 metres | 65 metres |
| Up to 1.5 L + 1.0 L 2,4-D 500 g/L (950 g ae/ha) | 85 metres | 85 metres | 80 metres | 80 metres |

Group 5 (500 g 2,4-D/L as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.5 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.7 L (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 2.1 L (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Dryland cropping: summer cereals | | | | |
| Up to 1.12 L (560 g ae/ha) | 60 metres | 60 metres | 60 metres | 55 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 4.4 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 4.5 L (2250 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 6 (625 g 2,4-D/L as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.2 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.4 L (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 1.7 L (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Dryland cropping: summer cereals | | | | |
| Up to 0.9 L (560 g ae/ha) | 60 metres | 60 metres | 60 metres | 55 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 3.5 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 3.6 L (2250 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 7 (800 g 2,4-D/L as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 0.9 kg (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.1 kg (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 1.3 kg (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Dryland cropping: summer cereals | | | | |
| Up to 0.7 kg (560 g ae/ha) | 60 metres | 60 metres | 60 metres | 55 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 2.8 kg (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 2.8 kg (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 8 (720 g 2,4-D/L as the DMA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.0 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.2 L (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 1.5 L (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Dryland cropping: summer cereals | | | | |
| Up to 0.78 L (560 g ae/ha) | 60 metres | 60 metres | 60 metres | 55 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 3 L (2160 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 3.1 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 9 (625 g 2,4-D/L as the DMA/DEA salts):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.2 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.4 L (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 1.7 L (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Dryland cropping: summer cereals | | | | |
| Up to 0.9 L (560 g ae/ha) | 60 metres | 60 metres | 60 metres | 55 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 3.5 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 3.5 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 10 (475 g 2,4-D/L as the DMA/DEA salts):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|--|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.6 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Tropical & subtropical uses: Sugar cane | | | | |
| Up to 4.6 L (2200 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 4.75 L (2250 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 11 (500 g 2,4-D/L as the DEA salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|--|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.5 L (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.7 L (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 2.1 L (1080 g ae/ha) | 95 metres | 90 metres | 90 metres | 85 metres |
| Dryland cropping: summer cereals | | | | |
| Up to 1.12 L (560 g ae/ha) | 60 metres | 60 metres | 60 metres | 55 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 4.4 L (2220 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |
| Tropical & subtropical uses: Peanuts | | | | |
| Up to 4.5 L (2250 g ae/ha) | 180 metres | 170 metres | 150 metres | 140 metres |

Group 13 (300 g 2,4-D/L, form not specified): covered by Group 2 buffer zones.

Group 14a (700 g 2,4-D/kg as the Sodium salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|--|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.1 kg (750 g ae/ha) | 75 metres | 70 metres | 70 metres | 70 metres |
| Up to 1.25 kg (880 g ae/ha) | 80 metres | 80 metres | 75 metres | 75 metres |
| Up to 1.6 kg (1120 g ae/ha) | 95 metres | 95 metres | 90 metres | 85 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 5.2 kg (3640 g ae/ha) | 375 metres | 350 metres | 250 metres | 220 metres |

Group 14b (800 g 2,4-D/kg as the Sodium salt):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|--|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 1.4 kg (1120 g ae/ha) | 95 metres | 95 metres | 90 metres | 85 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 4.5 kg (3600 g ae/ha) | 375 metres | 350 metres | 250 metres | 220 metres |

Group 17 (577 g 2,4-D + 100 g Ioxynil/L as EHE): no registered aerial uses in dryland winter or summer cereals. Registered for aerial application in sugarcane.

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|--|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Tropical & subtropical uses: Sugarcane: | | | | |
| Up to 2.0 L (1150 g ae/ha) | 100 | 150 | 90 | 140 |

Group 18 (600 g 2,4-D/L as EHE):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|--|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 0.25 L (155 g ae/ha) | 20 metres | 35 metres | 25 metres | 35 metres |
| Up to 0.9 L (560 g ae/ha) | 60 metres | 90 metres | 60 metres | 80 metres |
| Dryland cropping: Preparatory spray and harvest aid application | | | | |
| Up to 1.9 L (1140 g ae/ha) | 100 metres | 150 metres | 90 metres | 140 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 1.3 L (780 g ae/ha) | 75 metres | 110 metres | 70 metres | 100 metres |
| Up to 2.7 L (1620 g ae/ha) | 130 metres | 250 metres | 120 metres | 180 metres |

Group 19 (680 g 2,4-D/L as EHE):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|--|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 0.23 L (155 g ae/ha) | 20 metres | 35 metres | 25 metres | 35 metres |
| Up to 0.8 L (560 g ae/ha) | 60 metres | 90 metres | 60 metres | 80 metres |
| Dryland cropping: Preparatory spray and harvest aid application | | | | |
| Up to 1.7 L (1140 g ae/ha) | 100 metres | 150 metres | 90 metres | 140 metres |
| Tropical & subtropical uses: Sugarcane | | | | |
| Up to 1.15 L (780 g ae/ha) | 75 metres | 110 metres | 70 metres | 100 metres |
| Up to 2.4 L (1620 g ae/ha) | 130 metres | 250 metres | 120 metres | 180 metres |

Group 20 (421 g 2,4-D/L as EHE):

| Application rate (/ha) | Downwind mandatory no spray zone | | | |
|---|----------------------------------|-------------|------------|-------------|
| | Fixed wing | | Helicopter | |
| | Aquatic | Terrestrial | Aquatic | Terrestrial |
| Dryland cropping: winter cereals and fallows | | | | |
| Up to 250 mL (105 g ae/ha) | 10 metres | 20 metres | 20 metres | 30 metres |
| Up to 500 mL (210 g ae/ha) | 25 metres | 45 metres | 30 metres | 45 metres |
| Up to 900 mL (380 g ae/ha) | 45 metres | 65 metres | 45 metres | 65 metres |