

**CAUTION**  
**KEEP OUT OF REACH OF CHILDREN**  
**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**



**Dow AgroSciences**

# GF-2685

## Herbicide



**ACTIVE CONSTITUENT:** 100 g/kg HALAUXIFEN as the methyl ester  
100 g/kg CLOQUINTOCET- MEXYL

GROUP	I	HERBICIDE
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A wettable granule formulation for post-emergent control of broadleaf weeds in wheat and barley as specified in the Directions for Use.

**Dow AgroSciences Australia Limited**

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**CUSTOMER SERVICE TOLL FREE: 1-800 700 096**

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**Contents: 500g, 1, 5 and 10 kg**

GMID:

## DIRECTIONS FOR USE

### RESTRAINTS

**DO NOT** apply to crops or weeds which may be stressed due to a range of factors including, but not limited to: drought, or water logging; prolonged or severe frosts; sustained high temperatures; poor nutrition (including deficiency and trace element toxicity); root diseases; or previous herbicide treatment as reduced weed control and / or increased crop injury may result.

**DO NOT** apply if rain is likely within 3 hours as weed control may be reduced.

**DO NOT** apply to oats.

**DO NOT** apply to cereals after full flag leaf emergence (BBCH 39).

### SPRAY DRIFT RESTRAINTS

**DO NOT** apply GF-2685 with spray droplets smaller than a coarse spray droplet size category according to the "APVMA Compliance Instructions for Mandatory COARSE or VERY COARSE Droplet Size Categories" located under this title in the **GENERAL INSTRUCTIONS** section of this label.

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

**DO NOT** apply during surface temperature inversion conditions at the application site.

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 with start and finish times of application;
2. Location address and paddock/s sprayed;
3. Full name of this product;
4. Amount of product used per hectare and number of hectares applied to;
5. Crop/situation and weed/pest;
6. Wind speed and direction during application;
7. Air temperature and relative humidity during application;
8. Nozzle brand, type, spray angle, nozzle capacity and spray system pressure measured during application;
9. Name and address of person applying this product. (Additional record details may be required by the state or territory where this product is used.)

### Aquatic Areas

**DO NOT** apply if there are aquatic or wetland areas including aquacultural ponds downwind from the application area and within the **mandatory no-spray zones** shown in the table below.

<b>Table 1 – No-Spray Zones for Protection of the Aquatic Environment</b>		
<b>FOR AERIAL APPLICATION</b>		
<b>Wind Speed Range at Time of Application</b>	<b>Downwind Mandatory No-Spray Zone</b>	
	<b>Fixed-Wing</b>	<b>Helicopter</b>
from 3 to 8 kilometres per hour	20 metres	20 metres
from 8 to 14 kilometres per hour	20 metres	20 metres
from 14 to 20 kilometres per hour	20 metres	20 metres
<b>FOR GROUND APPLICATION</b>		
from 3 to 20 kilometres per hour	5 metres	

## Terrestrial Areas

**DO NOT** apply if there are non-target vegetation or animal habitat downwind from the application area and within the **mandatory no-spray zones** shown in the table below.

<b>Table 2 – No-Spray Zones for Protection of the Terrestrial Environment</b>		
<b>FOR AERIAL APPLICATION</b>		
<b>Wind Speed Range at Time of Application</b>	<b>Downwind Mandatory No-Spray Zone</b>	
	<b>Fixed-Wing</b>	<b>Helicopter</b>
from 3 to 8 kilometres per hour	60 metres	40 metres
from 8 to 14 kilometres per hour	60 metres	60 metres
from 14 to 20 kilometres per hour	80 metres	60 metres
<b>FOR GROUND APPLICATION</b>		
from 3 to 20 kilometres per hour	10 metres	

## Wheat and Barley

Apply to wheat and barley; from 3 leaf (BBCH 13) to full flag leaf emergence (BBCH 39)			
Always apply with Uptake Spraying Oil at 500 mL/100 L			
WEED	STAGE AND SIZE	RATE g /ha	CRITICAL COMMENTS
Deadnettle ( <i>Lamium amplexicaule</i> )	Up to the 6 leaf stage and not more than 10 cm high	50	Do not apply after full flag leaf emergence (BBCH 39). Apply to actively growing weeds. Control may be reduced if applied to stressed weeds, regardless of the cause. Weeds emerging after treatment will not be controlled. High levels of control can generally be expected. However, some regrowth may occasionally occur. Final control may be reduced when there is good soil moisture for an extended period following application; in uncompetitive crops; or in crops planted on wide row spacing's. Final control is generally higher when weeds are small at application. Higher levels of control are likely when weeds are small at application. Control is likely to be reduced when weed density is high and limits spray coverage.
Dense-flowered fumitory ( <i>Fumaria densiflora</i> )	Up to 10 cm high		
Mexican poppy ( <i>Argemone mexicana</i> )	Up to the 6 leaf stage and not more than 10 cm high		
Subterranean clover ( <i>Trifolium subterraneum</i> )	Up to the 6 leaf stage and not more than 8 cm in diameter		
Flax-leaf fleabane ( <i>Conyza bonariensis</i> )	Up to the 6 leaf stage and not more than 6 cm in diameter	50 to 100	
Prickly lettuce ( <i>Lactuca serriola</i> )	Up to the 6 leaf stage and not more than 10 cm in diameter	100	
Milk thistle / Sowthistle ( <i>Sonchus oleraceus</i> ); Rough sowthistle ( <i>Sonchus asper</i> )	Up to the 6 leaf stage and not more than 8 cm in diameter		

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

## WITHHOLDING PERIODS

**Harvest: NOT REQUIRED WHEN USED AS DIRECTED.**

**Grazing/cutting for stockfood: DO NOT GRAZE OR CUT TREATED CROPS FOR STOCK FEED FOR 2 WEEKS AFTER APPLICATION.**

#### **LIVESTOCK DESTINED FOR EXPORT MARKETS**

When GF-2685 is used as directed and the above withholding period is observed, livestock commodities are considered acceptable for export. However, export requirements are subject to change. Consult your exporter for updated information about specific market requirements. When using GF-2685 Herbicide in a tank mix with another product, observe whichever harvest or grazing/stockfood withholding period that is longer.

#### **CROP SAFETY**

Minor, transient crop effects may be observed following an application of GF-2685. Crop injury is likely to be minor, with quick recovery if crops are healthy and growing quickly at application. Recovery is likely to take longer where crop growth is limited regardless of the cause. Grain yield is normally unaffected. GF-2685 Herbicide has been tested over major commercially grown crop varieties, but not all of those that may be grown. For information on crop variety selectivity consult your local reseller or Dow AgroSciences.

#### **GENERAL INSTRUCTIONS**

#### **RESISTANT WEEDS WARNING**

<b>GROUP</b>	<b>I</b>	<b>HERBICIDE</b>
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GF-2685 is a member of the pyridine group of herbicides. The product has the disrupters of plant cell growth mode of action. For weed resistance management, the product is a group I herbicide. Some naturally-occurring weed biotypes resistant to GF-2685 and other disrupters 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 GF-2685 or other disrupters of plant growth herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Dow AgroSciences Australia Limited accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

Strategies to minimize the risk of herbicide resistance are available. Consult your farm chemical supplier, consultant or the CropLife website ([www.croplifeaustralia.org.au](http://www.croplifeaustralia.org.au))

#### **CROP ROTATION RECOMMENDATIONS**

Safe recropping periods apply for all crops following GF-2685 application. Susceptible crops include, but are not limited to, those listed in the table below.

##### **Re-cropping guidelines for southern Australia**

Crops	Rate applied g/ha	Minimum Rainfall Required	Minimum time requirement
Wheat, Barley, Triticale, Oats, Canola	50 to 100 g	50 mm	4 weeks
Peas	50 to 100 g	75 mm	7 months
Lentils, Sub clover, Chickpeas,	50	100 mm	7 months

Faba beans, Medic, Vetch			
Lentils; Sub clover; Chickpeas; Faba beans; Medic; vetch	100	150 mm	7 months

#### **Re-cropping guidelines for northern Australia**

<b>Crops</b>	<b>Rate applied g/ha</b>	<b>Minimum Rainfall Required</b>	<b>Minimum time requirement</b>
Wheat, Barley, Triticale, Oats, Canola	50 to 100 g	50 mm	4 weeks
Chickpeas, Faba beans, Medic Vetch	50	150 mm	7 months
Chickpeas, Faba beans, Medic, vetch	100	200 mm	7 months

GF-2685 is primarily broken down in soil by microbial activity. Relatively quick breakdown will be associated with extended periods of soil moisture when soil temperatures are warm. Breakdown may be slow in very dry seasons, or in cold, waterlogged soils, extending the plant back interval to susceptible crops. Plant back intervals should be extended when more than 50% of the required rainfall totals consist of intermittent, light rain, which does not maintain soil wetting for at least a week.

Plant back to summer crops have not yet been established. Contact your Dow AgroSciences representative.

#### **WEED DENSITY**

Final control may be reduced where weed density is very high and limits spray coverage.

#### **SPRAY COVERAGE**

Control may be reduced in dense or advanced crops if spray coverage is limited.

#### **WIDE ROW SPACINGS**

Regrowth of treated weeds may be more likely where crops are grown on wide row spacings, or are un-competitive, especially if the soil remains moist for an extended period after application.

#### **WEED GROWTH STAGE**

Best results are usually achieved when applied to small weeds. Herbicide affected weeds that survive treatment may regrow when the soil remains moist for an extended period following application.

#### **ENVIRONMENTAL CONDITIONS AT APPLICATION**

Best results are usually achieved when herbicide application is made under conditions which favour rapid plant growth. Weed control may be reduced when plants are stressed by a range of factors including, but not limited to: drought, or water logging; prolonged or severe frosts; sustained high or low temperatures; poor nutrition (including deficiency and trace element toxicity); root diseases or previous herbicide application.

#### **CONTROL OF SUBSEQUENT GERMINATIONS**

GF-2685 has limited residual, pre-emergent activity and useful, reliable control of weeds germinating after application is unlikely.

## **APPLICATION**

Apply in 80 – 100L/ha water by ground boom and not less than 80 L/ha by aerial application.

### **APVMA compliance instructions for mandatory COARSE or larger droplet size categories**

#### **Important information**

These instructions inform those using this chemical product how to lawfully comply with the requirement of a COARSE or larger spray droplet size category for spray application.

Spray droplet size categories are defined in the ASAE S572 Standard (newer name may also be shown as ASABE) or the BCPC guideline. Nozzle manufacturers may refer to one or both of these documents, to identify droplet size categories; however, for a nozzle to comply with this requirement, the manufacturer must refer to at least one.

**Complying with the label requirement to use a specific droplet size category means using the correct nozzle that will deliver that droplet size category under the spray operation conditions being used. The APVMA has approved only the following specific methods for choosing the correct nozzle. Use one of the methods specified in these instructions to select a correct nozzle to deliver a COARSE or larger droplet size category.**

#### **Instructions for ground application—for COARSE droplet size or larger categories**

##### **Mandatory instructions for ground applications**

**USE ONLY** nozzles that the nozzles' manufacturer has rated to deliver a COARSE, a VERY COARSE or an EXTREMELY COARSE droplet size category, as referenced in ASAE S572 or BCPC. Choose a nozzle that is specified to provide the droplet size category required in the label Spray Drift Restraints.

**DO NOT** use a higher spray system pressure than the maximum the manufacturer specifies for the selected nozzle to deliver the droplet size category required in the label Spray Drift Restraint.

#### **Instructions for fixed-wing aerial application—for COARSE droplet size or larger categories**

Instructions in this section apply to fixed-wing aerial application of products for which the label Spray Drift Restraint requires a COARSE or a VERY COARSE spray droplet category.

Nozzle choices must be made using Option 1, 2 or 3 below. Option 1 nozzles are limited to a maximum aircraft speed of 110 knots and are for COARSE droplets only. Option 2 nozzles are limited to a maximum aircraft speed of 120 knots and are also for COARSE droplets only. Option 3 nozzles have their use conditions (maximum airspeed, nozzle spray angle, product used, orifice size and spray system pressure) specified in the APVMA Approved Aerial Agricultural Association of Australia (AAAA) Nozzle Calculator (described in Option 3). Depending on those use conditions, the calculator can identify a correct nozzle for either a COARSE or a VERY COARSE spray droplet category. (To use Option 3, aerial applicators must contact the AAAA for access to their approved nozzle calculator.)

#### **Mandatory instructions for fixed-wing aerial applications**

##### **Option 1**

For up to a maximum aircraft speed of 110 knots and a COARSE droplet size category, **USE ONLY** solid stream 0° nozzles with orifice diameter greater than or equal to 1.5 mm and oriented straight back to the flight direction. **USE ONLY** a spray system pressure greater than or equal to 3 bar.

#### **Mandatory Instructions for fixed-wing aerial applications (continued)**

##### **Option 2**

For up to a maximum aircraft speed of 120 knots and a COARSE droplet size category, **USE ONLY** narrow angle flat fan nozzles with spray angle less than or equal to 40° and oriented straight back to the flight direction. **USE ONLY** a spray system pressure greater than or equal to 4 bar.

## **Mandatory instructions for fixed-wing aerial applications (continued)**

### **Option 3**

USE ONLY nozzles rated by the APVMA Approved AAAA Nozzle Calculator as COARSE or VERY COARSE to comply with a product label's requirement for a COARSE or a VERY COARSE spray droplet size category. Use the AAAA Nozzle Calculator, and follow the additional instructions below in a), b) and c).

a) To identify a nozzle to comply with the required spray droplet category, aerial applicators must use only the droplet size category given in the nozzle calculator at the DV(0.1) position. The categories shown at the DV(0.5) and the DV(0.9) positions in the calculator must not be used for making a nozzle selection.

b) Aerial applicators must not apply the product at airspeeds greater than the speed used to select the nozzle. If an application airspeed that is slower than 100 knots (the minimum speed specified in the nozzle calculator) is planned, a nozzle identified as COARSE or VERY COARSE at 100 knots can also be used at these slower airspeeds, provided that the nozzle angle and system pressure are kept the same.

c) When a particular pesticide product is chosen within the nozzle calculator as one of the conditions set to select a nozzle, then aerial applicators must use that specific pesticide product with that nozzle. When a pesticide product is planned for use and is not available as a choice within the nozzle calculator, aerial applicators must use the category 'Other product' in the calculator to set the condition for selecting a nozzle.

## **Instructions for helicopter aerial application—for COARSE droplet size or larger categories**

Instructions in this section apply to helicopter application of products where the label Spray Drift Restraint requires a **COARSE**, a **VERY COARSE** or an **EXTREMELY COARSE** spray droplet category.

Nozzle choices must be made using Option 1, 2 or 3 below.

## **Mandatory instructions for helicopter aerial application**

### **Option 1**

For helicopter applications requiring a COARSE or a VERY COARSE spray droplet size category, USE ONLY nozzles selected with the methods previously specified for fixed-wing aircraft in Section 2.

## **Mandatory instructions for helicopter aerial Application (continued)**

### **Option 2**

When using Micronair controlled droplet applicators (Micron Sprayers Ltd), USE ONLY nozzles selected with the Micronair Droplet Size Prediction Models designed for Micronair products (and located on the company website) to choose a nozzle to satisfy the label requirement for a COARSE droplet size category. Important: to qualify for the COARSE category, the DV(0.1) value must be greater than 156 microns. Adjust parameters as necessary (eg lower the atomizer rotation rate) in order to achieve a DV(0.1) value greater than 156 microns.

## **Mandatory instructions for helicopter aerial application (continued)**

### **Option 3**

When using Accu-Flo nozzles (Bishop Equipment Mfg Inc), USE ONLY nozzles rated according to the manufacturer's instructions to select the correct nozzle to apply a COARSE, a VERY COARSE or an EXTREMELY COARSE droplet size category to satisfy the label requirement for one of those specific droplet size categories.

## **MIXING**

Measure the required quantity of granules by weighing on scales. GF-2685 granules are highly soluble in water and will dissolve rapidly once added to fast moving water. **Maintain agitation at all times, including during mixing as well as spraying.**

## **Spray rigs with premix hoppers**

For spray rigs that have a drop down chemical induction hopper, three-quarter fill this hopper with water and have the rinsing sprinkler operating. Add the GF-2685 and when dissolved, transfer this batch into the quarter filled main tank. Continue to rinse the hopper until the entire product has washed through.

#### **Spray rigs with limited bypass agitation**

For spray rigs that have limited bypass agitation, then as for most granulated formulations, pre-dissolve the GF-2685 in a bucket before adding them to the main tank. Add GF-2685 while stirring until the granules have dissolved.

**Tank-mixes: The following order should be followed (wait until each formulation is mixed before adding the next one):**

1. **Quarter** fill the spray tank while maintaining agitation.
2. Add GF-2685 granules, using the mixing procedure above.
3. Add LVE 600 MCPA (if required).
4. Add wettable powders, water dispersible granules or suspension concentrates.
5. Add other emulsified concentrates
6. Fill the spray tank to **half** full. Then add non-ionic surfactants or Uptake Spraying Oil.

#### **COMPATIBILITY**

**Herbicides:** GF-2685 is compatible with Dow AgroSciences LVE 600 MCPA Herbicide and Conclude<sup>TM</sup>

**Adjuvants:** Apply with Uptake<sup>TM</sup> Spraying Oil. Not all surfactants and crop oils are of equal quality. Consult Dow AgroSciences before selecting other alternatives.

#### **CLEANING SPRAY EQUIPMENT**

After using GF-2685 Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean tank, pump, line and nozzle filters.

After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, line, hoses and nozzles. Drain and repeat procedure twice.

**Complete Cleaning - Decontamination** - before using sprayer to treat crops that are susceptible to GF-2685 Herbicide:

Wash the tank and rinse as above. Then, quarter fill the tank and add a standard alkali based laundry detergent at 500 g (or mL) /100 L water and circulate throughout the system for at least fifteen minutes. If using a concentrated laundry detergent use 250 g (or mL)/100L water. Do not use chlorine-based cleaners.

**Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and their roots and watercourses.**

#### **PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

GF-2685 is very toxic to aquatic life. **DO NOT** contaminate wetlands or watercourses with this product or used containers.

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

**DO NOT** apply under weather conditions or from spraying equipment that may cause spray to drift onto non-target vegetation.



Refer to MINIMUM RECROPPING PERIODS for crop rotation information. Crops susceptible to GF-2685 include but are not limited to grain legumes (summer or winter), millets (*Echinochloa* spp.), lucerne, pasture legumes; cotton, fruit, hops, ornamentals, potatoes, safflower beets, sunflower, tobacco, tomatoes, all vegetables and vines.

### PROTECTION OF LIVESTOCK

- **DO NOT** graze or cut treated crops or plants for stock food except as specified under withholding periods.
- Poisonous plants may become more palatable after spraying and stock should be kept away from these plants until they have died down.

### STORAGE AND DISPOSAL

- Keep out of reach of children.
- Store in the closed, original container in a securely locked, dry, cool, well-ventilated place, out of direct sunlight.
- **DO NOT** store near food, feedstuffs, fertilisers or seed.

500 g pack size:

- Rinse container before disposal. Add rinsings to the spray tank. Do not dispose of undiluted chemicals on site. 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.

Over 1 kg pack size:

This container can be recycled if it is clean, dry, free of visible residues and has the **drumMUSTER** logo visible. Triple-rinse containers for disposal. Dispose of rinsate by adding to the spray tank. Do not dispose of undiluted chemicals on site. 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 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.

### SPILL AND LEAK MANAGEMENT

Do not touch or walk through spilled material. Dam area and prevent entry into waterways, and drains. Sweep up spilled material and place in a refuse vessel for disposal. Report large spills to Dow AgroSciences Emergency Services at 1-800 033 882.

### SAFETY DIRECTIONS

May irritate the eyes and skin.

Repeated exposure may cause allergenic disorders.

Avoid contact with the eyes and skin. Sensitive workers should use protective clothing.  
Wash hands after use.

### FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone: Phone Australia 13 11 26; New Zealand 0800 764 766.

### SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet for **GF-2685 HERBICIDE** which is available from Dow AgroSciences on request. Call Customer Service Toll Free on 1-800 700 096 or visit [www.dowagrosciences.com.au](http://www.dowagrosciences.com.au)

EMERGENCY RESPONSE  
(All Hours)  
RING FROM ANYWHERE IN AUSTRALIA  
**1-800 033 882**  
(LOCAL CALL FEE ONLY)

IN A TRANSPORT EMERGENCY ONLY  
DIAL 000  
FOR POLICE OR FIRE BRIGADE

DOM: Batch Number:



Barcode  
for stock  
identification

APVMA Approval No: 65055/57827

Made in USA