



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

CLERANDA™ HERBICIDE

**ACTIVE CONSTITUENT: 375 g/L METAZACHLOR
17.5 g/L IMAZAMOX**

GROUP **K B** HERBICIDE

For the pre-emergent and early post-emergent control of various broadleaved and some grass weeds in **Clearfield®** canola as per the Directions For Use Table.

IMPORTANT: READ THIS LEAFLET BEFORE USING THIS PRODUCT

CONTENTS: 1L, 3L, 5L, 10L

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APVMA Approval No.: 80711/101473

DIRECTIONS FOR USE

RESTRAINTS

Apply ONLY to certified **Clearfield** canola varieties with the **Clearfield** technology.

DO NOT apply to conventional or other herbicide tolerant canola varieties.

DO NOT apply to crops that are stressed due to conditions such as waterlogging, too little moisture, frost, disease or nutritional disorders.

DO NOT apply by aircraft.

DO NOT apply if rain is expected within 2 hours of application.

DO NOT apply products containing metazachlor more than once per season.

SPRAY DRIFT RESTRAINTS

DO NOT apply with spray droplets smaller than a **MEDIUM** spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline.

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.

MANDATORY NO-SPRAY ZONES

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

Table 1 – No-spray zones for protection of the aquatic environment

Downwind Mandatory No-Spray Zone	
For ground application	
From 3 to 20 kilometres per hour	50 metres

DO NOT apply if there are sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat downwind from the application area and within the mandatory no-spray zones shown in the table below:

Table 2 – No-spray zones for protection of the terrestrial environment

Downwind Mandatory No-Spray Zone	
For ground application	
From 3 to 20 kilometres per hour	80 metres

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 by the state or territory where this product is used.)

SITUATION	WEEDS	RATE per ha	CRITICAL COMMENTS
Canola varieties with Clearfield technology only Pre-emergence incorporated by sowing	Annual ryegrass (<i>Lolium rigidum</i>) Black bindweed/climbing buckwheat (<i>Fallopia convolvulus</i>) Brome grass (<i>Bromus spp.</i>) Crassula (<i>Crassula Spp.</i>) Wireweed (<i>Polygonum aviculare</i>) Wild oats (<i>Avena fatua</i>) Vetch (<i>Vicia sativa</i>) (suppression)	2 - 2.5 L	<p>Use higher rate when conditions are not optimal or where a heavy grass population is expected.</p> <p>Apply pre-sowing and incorporate by sowing (IBS) using knife points and press wheels. For best results apply just before sowing (refer to Interval between Application and Sowing in GENERAL INSTRUCTIONS).</p> <p>Avoid throwing treated soil into adjacent crop rows when sowing with knife points and press wheels.</p> <p>To reduce the risk of crop effects refer to Crop Safety in GENERAL INSTRUCTIONS.</p> <p>To optimise weed control apply directly to uncultivated soil. Weed control may be greatly reduced where weed seeds have been buried by cultivation prior to sowing.</p> <p>Weed control may be adversely affected by;</p> <ul style="list-style-type: none"> • uneven application, • application to ridged or cloddy soil, • stubble, plant residue or other ground cover particularly where this exceeds 50%, • germinated and emerged weeds that are not controlled by a knockdown herbicide, • insufficient rainfall within 7 to 10 days after application, • in soils prone to leaching, rainfall which is sufficiently heavy to cause movement of the herbicide out of the weed seed zone. <p>These factors when combined may substantially reduce weed control.</p> <p>Refer to the recropping interval table on this label and also refer to the appropriate companion product label if applicable, in case a longer re-crop sowing period is required.</p>
Canola varieties with Clearfield technology only Early Post emergence	Annual ryegrass (<i>Lolium rigidum</i>) (suppression) Wild oats (<i>Avena fatua</i>)	1L	<p>Do not apply after crop stage BBCH 13 and 2 leaf weed stage.</p> <p>Application should be made to very small healthy weeds. Ensure good foliar coverage of weeds to maximise levels of control.</p> <p>Addition of Hosten or Kwicken Adjuvant is required at mixing rate of 0.5% V/V when applied early post emergence.</p>

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

WITHHOLDING PERIOD:

HARVEST: NOT REQUIRED WHEN USED AS DIRECTED

GRAZING: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 13 WEEKS AFTER APPLICATION.

GENERAL INSTRUCTIONS

CLERANDA Herbicide is for use in Clearfield canola. Varieties with Clearfield technology are those that have been bred specifically to be tolerant to CLERANDA .

CLERANDA Herbicide is absorbed through the leaves, green stems and roots of susceptible weeds and moved from the point of contact throughout the plant. Weeds will either die or will remain stunted and will not

compete with the crop. Symptoms of kill may take two to three weeks to develop with death occurring up to one month from treatment. Symptoms first appear at the growth points where young foliage becomes discoloured and distorted before dying.

When used post-emergence, best results will be achieved when good contact and coverage of weeds occurs and weeds are actively growing. The product must be mixed with Haste or Kwickin as per the Directions for Use.

CLERANDA Herbicide also has some residual soil activity under good soil moisture conditions. Residual effects on weeds can be reduced when dry soil conditions follow application before the herbicide has moved to the root zone. Best results will be achieved when application is made to moist soil or if approximately 10 mm rain follows within several days of application. Vigorous crop growth will assist in suppressing weeds not completely killed and those germinating later.

INCORPORATION BY SOWING

CLERANDA HERBICIDE should be applied prior to sowing, and incorporated by sowing using knife points and press wheels as soon as practicable. Weeds germinating in the seed row may not be controlled. Weeds germinating from depth, weeds just about to emerge, or weeds that have emerged which are not controlled by a knockdown herbicide at sowing may not be controlled by CLERANDA HERBICIDE.

Caution not to throw treated soil from one sowing furrow into an adjacent furrow should be followed as this may result in crop damage.

COMPATIBILITY

Cleranda Herbicide is compatible with the following herbicides: glyphosate, Sharpen WG Herbicide, propizamide, atrazine, trifluralin, triallate, Stomp 440EC, terbutylazine

CROP SAFETY

In situations where a concentration of herbicide occurs in the planting row or at the planted crop seed may cause crop damage. Therefore situations such the following may result in potential crop damage:

- Deep planting furrows where soil infills into the planted furrow via such circumstances as wind or rain
- Heavy rainfall after application and before crop emergence particularly in soils with higher potential for leaching

Other stress events on the crop such as frost, waterlogging, disease, insect attack or vigor reductions from other tank mixed herbicides, and vigor reductions from some seed treatments may increase the potential for crop damage.

RECROPPING INTERVAL

This product is broken down in the soil by microbes in wet, aerobic conditions. Under conditions that do not favour breakdown, carry-over soil residues can affect susceptible follow crops. Normally safe residue levels may still affect follow crops when soil nutrition is low or marginal, when cold and very wet soil conditions prevail, or when soil pathogens or nematodes are present. As environmental and agronomic factors make it impossible to eliminate all risks associated with this product, rotational crop injury is always possible.

Note: when the intention is to grow cereals on Clearfield canola stubble (treated with CLERANDA) self-sown canola volunteers must be removed before they mature beyond 2-leaf, all macro and micro-nutrients must be maintained at levels necessary to grow the planned crops, and sulfonylureas must not be used.

The following minimum re-cropping intervals (months after application) should be observed.

Months after Application	Follow Crops
0	Clearfield canola
12	Wheat, Durum, Barley, Oats, Field peas, Chickpeas, Lupins
22	Conventional and other herbicide tolerant canola, All other crops

* **Non-Clearfield Barley, Oats, Triticale, Non-Clearfield Wheat:**

The following additional requirements apply if it is intended to sow these cereals during the next winter season:

- DO NOT apply **CLERANDA** later than the end of August (no later than the end of July in WA).
- DO NOT use **CLERANDA** in areas where rainfall from spraying to sowing of cereals is expected to be below **250 mm**.

For all situations, if expected rainfall is not received following use of **CLERANDA**, consult your local BASF representative before planting non-**Clearfield** cereals. In calculating rainfall actually received, place greater emphasis on rain received from application up to the end of Spring and lesser emphasis on break rains. If single **isolated** heavy summer and autumn falls and break rains are required to achieve rainfall targets, it may not be safe to sow non-**Clearfield** cereals within 10 months of application. Consult your local BASF representative for advice.

RESISTANT WEEDS WARNING

GROUP K B HERBICIDE

CLERANDA Herbicide is a member of the chloroacetamide and imidazolinone groups of herbicides and has the inhibitor of very long chain fatty acids (VLCFA inhibitors) and inhibitor of acetolactate-synthase (ALS) modes of action. For weed resistance management CLERANDA is a Group K and Group B herbicide. Some naturally-occurring weed biotypes resistant to CLERANDA, and other Group K and Group B herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by CLERANDA or other Group K and Group B herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, BASF Australia Ltd accepts no liability for any losses that may result from failure of this product to control resistant weeds.

BEST MANAGEMENT PRACTICE (BMP) PROGRAM

A detailed program has been developed that outlines sound agronomic and integrated weed management practices, designed to optimise the performance of the **Clearfield** Production Systems and minimise the potential for the development of herbicide resistance in weed populations.

Consultation on BMP should be undertaken with a **Clearfield**-accredited agronomist prior to use of CLERANDA Herbicide in the **Clearfield** Production Systems for wheat, barley and canola. Implementation of the BMP is an essential part of herbicide resistance management.

CROP SAFETY

This product may, in some circumstances, lead to transient crop yellowing and temporary slowing of growth of **Clearfield** canola but plants soon recover and yield is unaffected. This effect may be more pronounced when the product is used under poor growth conditions.

DO NOT use this product on any canola variety other than certified varieties with **Clearfield** technology. Extreme crop damage and/or death will result to conventional and other herbicide tolerant wheat and canola varieties.

TIMING

Incorporation by sowing as soon as practicable after application of CLERANDA HERBICIDE, but no later than 3 days after application.

If applying as a foliar application ensure weeds are no greater than 2 leaf stage and crop is no greater than BBCH13.

MIXING

Ensure sprayer and nozzle filters are clean before preparing the spray mixture. Half fill the spray tank with water and, with the agitators in motion, add the correct amount of CLERANDA HERBICIDE directly to the spray tank. Complete filling the tank with agitators in motion. Agitation must continue before and during spraying.

APPLICATION

Ground sprayers

Apply CLERANDA HERBICIDE as a broadcast application using a conventional boom sprayer with either mechanical or by-pass agitation. Spray equipment should be properly calibrated to ensure correct and uniform application. Use a spray volume of 80 to 250 litres per hectare. To minimise off-target drift use the lowest pressure and boom height which provides uniform coverage

Ensure complete and even spray coverage of the soil is achieved. Poor spray coverage may result from application to ridged or excessively cloddy soil or in situations of high stubble, plant residue or other ground cover. A significant reduction in weed control may result where stubble, plant residue or other ground cover exceeds 50%, and in situations where a 'cold' or incomplete burn of stubble results in a mass of material which can act as a physical barrier between the herbicide and germinating weeds - this can be exacerbated in header trails where there may be greater weed seed numbers and higher levels of plant residue. Weed control can be particularly affected where CLERANDA HERBICIDE is applied to a barrier of stubble, plant residue or other ground cover and there is insufficient following rainfall to transfer the herbicide to the soil surface and the germinating weed seeds.

Aerial sprayers

DO NOT apply CLERANDA HERBICIDE by aircraft.

EQUIPMENT CLEAN-UP

Thoroughly flush all spray equipment with water following the use of CLERANDA Herbicide and before use with other products. If tank-mixed with other products, also follow clean-up procedures recommended for the mixing partner.

RE-ENTRY

Nil.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spray equipment, which may cause spray drift onto nearby susceptible plants, adjacent crops, or pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Highly toxic to aquatic life. DO NOT contaminate streams, rivers or waterways with CLERANDA HERBICIDE or used container.

STORAGE AND DISPOSAL (5L, 10L, 20L)

Store in the closed, original container in a dry, 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 containers below 500mm 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 and product.

STORAGE AND DISPOSAL (110L only)

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SAFETY DIRECTIONS

Repeated exposure may cause allergic disorders. Avoid contact with skin. Wash hands after use.

FIRST AID

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

MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet (MSDS).

CONDITIONS OF SALE

All conditions and warranties rights and remedies implied by law or arising in contract or tort whether due to the negligence of BASF Australia Ltd or otherwise are hereby expressly excluded so far as the same may legally be done provided however that any rights of the Buyer pursuant to non-excludable conditions or warranties of the Competition and Consumer Act 2010 or any relevant legislation of any State are expressly preserved but the liability of BASF Australia Ltd or any intermediate Seller pursuant thereto shall be limited if so permitted by the said legislation to the replacement of the goods sold or the supply of equivalent goods and all liability for indirect or consequential loss or damage of whatsoever nature is expressly excluded. This product must be used or applied strictly in accordance with the instructions appearing hereon. This product is solely sold for use in Australia and must not be exported without the prior written consent of BASF Australia Ltd.

FOR SPECIALIST ADVICE IN AN EMERGENCY ONLY PHONE 1800 803 440 TOLL FREE-ALL HOURS-AUSTRALIA WIDE

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Batch No:

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The Chemical Company

BASF Australia Ltd

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