

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

LIBERTY[®] HERBICIDE

ACTIVE CONSTITUENT: 200 g/L GLUFOSINATE-AMMONIUM

GROUP	N	HERBICIDE
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For non-residual control of certain broadleaf and grass weeds in LibertyLink[®] Canola varieties (with tolerance to Liberty[®] Herbicide) as specified in the DIRECTIONS FOR USE table.

IMPORTANT: READ THE LABEL BEFORE USING THIS PRODUCT

CONTENTS: 1L, 20L, 110L, 1000L

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APVMA Approval No.: 53595/120542

DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply to canola varieties other than LibertyLink® Canola varieties with tolerance to Liberty® Herbicide.

DO NOT apply by aircraft.

DO NOT apply by mister.

DO NOT apply when rain is expected within 6 hours (Liberty® Herbicide is a water-soluble herbicide).

DO NOT irrigate within 6 hours of application.

DO NOT apply after the early bolting stage (BBCH 33) in canola.

DO NOT apply onto weeds when dew, fog or mist is present.

DO NOT apply to weeds under stress due to, for example, very dry, very wet, frosty, windblasted, insect damaged, nutrient deficient or diseased conditions.

CROP	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
USE ONLY WITH LIBERTYLINK® CANOLA VARIETIES (WITH TOLERANCE TO LIBERTY® HERBICIDE).				
LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide) only Apply to crop from 2 leaf to early bolting stage.	Annual ryegrass (<i>Lolium rigidum</i>)	2 to 4 leaf/start of tillering (Z12 to Z21)	2 L/ha followed by 2 L/ha 7 - 14 days later OR 3 L/ha followed by 3.0 L/ha 7 - 14 days later	Apply Liberty® Herbicide to crop from 2 leaf to early bolting stage. IT IS ESSENTIAL TO COMPLETE BOTH APPLICATIONS. The sequential application is designed for a weed control program.
	Barley grass (<i>Hordeum leporinum</i>), Brome grass (<i>Bromus</i> spp.)		1.5 L/ha followed by 1.5 L/ha 7 - 14 days later	Liberty® Herbicide does not provide residual weed control. Apply the second Liberty application 7 to 14 days after the first Liberty application. A shorter interval between applications will result in better weed control. Complete coverage of weeds is essential for good control. Poor coverage may result in re- growth. Annual ryegrass Use the higher rate of Liberty® Herbicide where the weed populations are high or growing conditions are less than ideal.
	Capeweed (<i>Arctotheca calendula</i>)	2 to 8 leaf		
	Chickpea (<i>Cicer arietinum</i>), Corn gromwell (<i>Lithospermum arvense</i>) Doublegee/Spiny emex/ Three cornered jack (<i>Emex australis</i>), Field pea (<i>Pisum sativum</i>), Fumitory (<i>Fumaria</i> spp.), Lentil (<i>Lens culinaris</i>), Loosestrife (<i>Lythrum hyssopifolia</i>), Lupin/narrowleaf lupin (<i>Lupinus angustifolius</i>),	2 to 4 leaf		
			For optimal annual ryegrass control in Liberty Tolerant LibertyLink® Canola varieties only ; applications of Liberty® Herbicide should be used in conjunction with pre- and early post-emergence applications of suitable registered herbicides e.g. pre-emergence	

CROP	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide) only Apply to crop from 2 leaf to early bolting stage.	Medic (<i>Medicago</i> spp.), Prickly lettuce (<i>Lactuca serriola</i>), Scotch thistle (<i>Onopordum acanthium</i>) Silver grass/squirrel- tailed fescue (<i>Vulpia myuros</i>)	2 to 4 leaf	1.5 L/ha followed by 1.5 L/ha 7 - 14 days later	<p>applications of metazachlor, propyzamide or trifluralin and post-emergence applications of clethodim on susceptible annual ryegrass.</p> <p>Dual Liberty Tolerant LibertyLink® Triazine Tolerant (LT) Canola varieties</p> <p>For optimal annual ryegrass control in Liberty Tolerant LibertyLink® Triazine Tolerant (LT) Canola varieties only; applications of Liberty® Herbicide should be used in conjunction with pre- and early post-emergence applications of suitable registered herbicides e.g. pre-emergence applications of atrazine, metazachlor, simazine, propyzamide or trifluralin and post-emergence applications of atrazine or clethodim on susceptible annual ryegrass.</p> <p>Wild radish</p> <p>Do not apply to dense populations of wild radish (>25 weeds/m²).</p> <p>Use of Liberty® Herbicide in conjunction with a pre-emergence application of atrazine in Liberty Tolerant LibertyLink® Triazine Tolerant (LT) Canola varieties only may result in improved overall suppression.</p>
	Crassula/Stone crop (<i>Crassula</i> spp.)	2 to 8 leaf		
	Subterranean clover (<i>Trifolium subterraneum</i>) Toad rush (<i>Juncus bufonius</i>), Tree hogweed (<i>Polygonum patulum</i>), Vetch (<i>Vicia sativa</i>)	2 to 4 leaf		
	Volunteer barley (<i>Hordeum vulgare</i>), Volunteer oats (<i>Avena sativa</i>), Volunteer wheat (<i>Triticum aestivum</i>)	2 leaf to 3 tillers (Z12 to Z23)		
	Wild oats (<i>Avena</i> spp.)	2 leaf to 2 tillers (Z12 to Z22)		
	Wireweed (<i>Polygonum aviculare</i>)	2 to 4 leaf		
	Yellow burweed/amsinckia (<i>Amsinckia intermedia</i>)	2 to 6 leaf		
	Suppression only Wild radish (<i>Raphanus raphanistrum</i>)	2 to 4 leaf	3 L/ha followed by 3.0 L/ha 7 to 14 days later	
	LibertyLink® Canola varieties (with tolerance to Liberty Herbicide) grown for seed production only	Non-tolerant canola plants	2-4 leaf 4-6 leaf up until time of bolting	

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

APPLICATION OF LIBERTY® HERBICIDE TO CANOLA VARIETIES OTHER THAN LIBERTYLINK® CANOLA VARIETIES (WITH TOLERANCE TO LIBERTY® HERBICIDE) WILL RESULT IN SEVERE CROP INJURY OR DEATH OF THE CROP.

WITHHOLDING PERIODS

HARVEST: NOT REQUIRED WHEN USED AS DIRECTED.

GRAZING

LIVESTOCK NOT PRODUCING MILK FOR HUMAN CONSUMPTION:

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 10 WEEKS AFTER APPLICATION.

LIVESTOCK PRODUCING MILK FOR HUMAN CONSUMPTION:

DO NOT GRAZE OR CUT FOR STOCK FOOD

EXPORT OF TREATED PRODUCE

Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with Liberty® Herbicide. If you are growing produce for export, please check with BASF Australia Ltd for the latest information on MRLs and import tolerances BEFORE using Liberty® Herbicide.

GENERAL INSTRUCTIONS

Liberty is a non-volatile herbicide with selective activity against many annual and perennial broadleaf weeds and grasses in LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide) that are specially developed to be tolerant to Liberty® Herbicide.

Apply Liberty® Herbicide to the crop from 2 leaf to early bolting stage. Liberty® Herbicide is absorbed by plant foliage and green stems. It is inactive in soil and does not provide residual weed control. Liberty Herbicide is not significantly translocated as an active herbicide throughout the plant, and therefore will only kill that part of a green plant that is contacted by spray. The shorter interval between applications will give better weed control. Best results are achieved when applications are made under good growing conditions to young, actively growing weeds. Liberty® Herbicide will have an effect on weeds that are larger than the recommended leaf stage, but speed of activity and control may be reduced. Application to weeds under stress (e.g. due to continuous severe frosts, dry or waterlogged conditions, windblasted, insect damaged, nutrient deficient or diseased conditions) should be avoided.

Climatic Conditions

Best results are achieved when Liberty® Herbicide is applied under mild humid conditions. Poor results may occur under hot, dry conditions. Under cool (below 10°C), dry and low relative humidity conditions speed of action and control may be reduced.

Symptoms

Visible symptoms of weed control appear in 3 to 7 days, but complete desiccation may take 20 to 30 days under cool conditions. Minor transient crop effects may be visible after application of Liberty® Herbicide to LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide).

Mixing Instructions

Liberty® Herbicide mixes easily with water. Clean water should always be used for mixing with Liberty® Herbicide. Ensure that the spray tank is free of any residues of previous spray materials. Maintain agitation whilst filling the tank and throughout the spraying operation.

Liberty® Herbicide is a soluble concentrate (SL) formulation. When using in a tank mix with other products the

following mix order should be observed;

1. Partly fill the spray tank with water, as per label directions, to at least 70% full. **Commence agitation** and maintain agitation during the mixing and spraying process.
2. Add any **Water Conditioners**.
3. Add any **Wettable Powders (WP)** or **Dry Flowable (DF)** products
4. Add any **Water Dispersible Granules (WDG)** products.
5. **Add any Flowable Liquids (FL) or Suspension Concentrates (SC).**
6. Add any **Emulsifiable Concentrates (EC)**.
7. Add any **Aqueous Concentrate (AC)** or **Soluble (Liquid) Concentrates (SL)** such as Liberty® Herbicide
8. Add **Adjuvant** if required.
9. Fill the remainder of the spray tank with water.

Use the spray mix within 24 hours of preparation (unless otherwise stated on label).

Use of Surfactant/Wetting agent

The addition of a surfactant is not required with Liberty® Herbicide.

Application Equipment

Ground Boom Sprayers Only

Aim to apply a thorough and even coverage of spray to the entire target plant. Dense stands of weeds should be thoroughly wetted with spray. Incomplete coverage due to e.g. stubble retention, crop plants or weed leaf to leaf overlap, may result in poor control. Equipment should be such that adequate coverage, penetration and volume of spray liquid can be achieved.

Liberty® Herbicide should be applied at the rate shown in the Directions for Use table in sufficient water to give thorough coverage of weeds. It is recommended that 80 to 100 L water/ha is applied with spray droplets of a MEDIUM droplet size category. In some situations (e.g. high weed density) increased water volumes are likely to give higher levels of weed control.

Sprayer cleanup

Clean all equipment after use by thoroughly flushing with water.

Compatibility

Liberty may be mixed with the herbicides Select®*, Targa®* and Verdict®* 520 without loss of efficacy or adverse crop effects. Liberty may be mixed with the insecticides Decis®* Options and dimethoate without loss of efficacy or adverse crop effects.

For LibertyLink® Canola varieties tolerant to both Liberty Herbicide AND triazine herbicides: Liberty® Herbicide may be mixed with a good quality atrazine product without loss of efficacy and with only minor, transient crop effects. **DO NOT** apply Liberty® Herbicide mixed with atrazine to any canola other than varieties with both triazine and Liberty tolerance.

Seek advice from BASF Australia Ltd before using products other than Liberty® Herbicide or those mentioned above on LibertyLink® Canola varieties.

RECRIPPING INTERVALS

Minimum recropping intervals apply for crops following Liberty® Herbicide application.

For advice on crops not listed below, contact the manufacturer, BASF Australia Ltd.

Crop	Minimum recropping interval
Cereals, pulses, oilseeds	14 days

RESISTANT WEEDS WARNING

GROUP N HERBICIDE

Liberty® Herbicide is a member of the phosphinic acid group of herbicides. Liberty® Herbicide is an inhibitor of glutamine synthetase. For weed resistance management Liberty is a Group N herbicide. Some naturally-occurring weed biotypes resistant to Liberty and other Group N 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 Liberty or other Group N herbicides. Since occurrence of resistant weeds is difficult to detect prior to use, BASF Australia Ltd accepts no liability for any losses that may result from the failure of Liberty to control resistant weeds.

Where resistance to this product is suspected this should be reported either directly to the Australian Pesticides and Veterinary Medicines Authority (APVMA) or through BASF Australia Ltd.

LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide) Canola Resistance and Crop Management Plans

Detailed management plans have been developed that outline sound agronomic practices and integrated weed management principles, designed to optimise the performance of LibertyLink® Canola varieties (with tolerance to Liberty Herbicide), minimise the potential for the development of herbicide resistance in weed populations and ensure compliance with the Conditions of the LibertyLink® Canola OGTR approval.

The LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide) Resistance Management and Crop Management Plans should be consulted prior to the use of this product on LibertyLink® Canola varieties. Implementation of the management plans are an essential part of herbicide resistance management. This product is supplied by BASF Australia Ltd on condition that it is used in conjunction with the LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide) Resistance Management and Crop Management Plans (available on www.crop-solutions.basf.com.au).

Pre-plant paddock preparation: Control all existing weeds by cultivation or by using a sufficient rate of knockdown herbicide. This may be a glyphosate or paraquat/diquat-based product.

PRECAUTION

Re-entry period

Do not allow entry into treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life. DO NOT contaminate streams, rivers or waterways with this product or the used container.

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 nearby susceptible plants/crops, cropping lands or pastures. Do not apply on desirable foliage (other than LibertyLink® Canola varieties with tolerance to Liberty® Herbicide) or allow drift onto the foliage or green bark of trees and vines, as damage will occur.

STORAGE

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

DISPOSAL

20 L container

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 for appropriate disposal to an approved waste management facility. If an approved 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. Do not re-use empty container for any other purpose.

110 L container

If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured. Empty container by pumping through dry-break connection system. Do not attempt to breach the valve system or the filling point, or contaminate the container with water or other products. Ensure that the coupler, pump, meter and hoses are disconnected, triple rinsed and drained after each use. When empty, or contents no longer required, return the container to the point of purchase.

1000 L container

If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured. Empty product as required into application equipment. Do not attempt to breach the valve system or filling point, or contaminate the container with water or other products. Ensure that equipment used in transfer of the product is disconnected, triple rinsed and drained after each use. When the container is empty, close all caps and valves and return the container to the point of purchase.

SAFETY DIRECTIONS

Harmful if absorbed by skin contact or swallowed. Will irritate the eyes and skin. Avoid contact with the eyes and skin. If product on skin, immediately wash area with soap and water. If product in eyes, wash out immediately with water. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow length PVC or nitrile gloves and face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles, and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet available from your supplier.

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.

APVMA Approval No: 53595/120542

Batch No:

Date of Manufacture:

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