

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

**Liberty<sup>®</sup> 200**

HERBICIDE

Active Constituent: 200 g/L GLUFOSINATE-AMMONIUM

GROUP **N** HERBICIDE

**For non-residual control of certain broadleaf weeds in Liberty Link<sup>®</sup> cotton varieties as specified in the DIRECTIONS FOR USE table**

### GENERAL INSTRUCTIONS

Liberty 200 Herbicide is a non-volatile herbicide with selective activity against many annual and perennial weeds in Liberty Link cotton varieties that are specially developed to be tolerant to Liberty 200.

Liberty 200 is absorbed by plant foliage and green stems. It is inactive in soil and does not provide residual weed control. Liberty 200 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. Best results are achieved when applications are made under good growing conditions to young, actively growing weeds. Liberty 200 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 should be avoided. Visible symptoms of control appear in 3 to 7 days, but complete desiccation may take 20 to 30 days under cool conditions.

### Liberty Link Cotton and Liberty 200 Herbicide Crop Management Plan

A detailed management plan has been developed that outlines sound agronomic practices and integrated weed management principles and requires growers to implement a preventative weed resistance management strategy. The requirements of the plan are designed to optimise the performance of Liberty Link cotton and minimise the potential for the development of herbicide resistance in weed populations.

The *Liberty Link Cotton and Liberty 200 Herbicide Crop Management Plan* should be consulted prior to the use of this product on Liberty Link cotton. Implementation of the management plan is an essential part of herbicide resistance management. This product is supplied by Bayer CropScience on condition that it is used in conjunction with the *Liberty Link Cotton and Liberty 200 Herbicide Crop Management Plan* (available from [www.bayercropscience.com.au](http://www.bayercropscience.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 plus diquat based product.

### Climatic Conditions

Best results are achieved when Liberty 200 Herbicide is applied under warm humid conditions, (e.g. temperatures below 33° C with a relative humidity above 50 %). Under any other conditions efficacy and speed of action of Liberty 200 may be reduced.

### Use of Surfactant/Wetting agent

The addition of a surfactant is not required with Liberty 200 Herbicide.

### Mixing Instructions

Liberty 200 Herbicide mixes easily with water. Clean water should always be used for mixing with Liberty 200. Ensure that the spray tank is free of any residues of previous spray materials.

Two-thirds fill the spray tank with clean water, and with agitator operating add the required amount of Liberty 200. Add other relevant compatible products. Top the tank up to the required volume with clean water with agitator running.

### Application Equipment

#### Ground Boom Sprayers Only

Aim to apply a thorough and even coverage of spray to the target weed. Dense stands of weeds should be thoroughly wetted with spray. Incomplete coverage may result in poor control. Equipment set-up should be such that adequate coverage, penetration and volume of spray liquid can be achieved while the potential for off-target movement is minimised, by consideration of factors including nozzle type and size, spray pressure, temperature, relative humidity, wind speed and direction.

Liberty 200 should be applied at the recommended rate in sufficient water to give thorough coverage of weeds. Application volumes of at least 100 L water/ha through flat fan nozzles with a droplet size of 200 to 300 microns are recommended for most situations.

**Compatibility**

Liberty 200 Herbicide may be tank mixed with some other herbicides and insecticides. Check with your local Bayer CropScience representative before tank mixing other herbicides or insecticides with Liberty 200.

**Sprayer cleanup**

Clean all equipment after use by thoroughly flushing with water.

**Weeds Audit**

Growers of Liberty Link Cotton are required, as specified in the Licence agreement with Bayer CropScience, to comply with and conduct weed audits following applications of Liberty 200 Herbicide. Growers are required to report any adverse event such as suspected weed resistance to Bayer CropScience as soon as it is identified. Consult suitable agronomic advice and/or publication for control of survivors, i.e. weeds not controlled by Liberty 200.

**Resistant Weeds Warning**

Liberty 200 Herbicide is a member of the glycine group of herbicides.

Liberty 200 is an inhibitor of glutamine synthetase. For weed resistance management Liberty 200 is a Group N herbicide. Some naturally occurring weed biotypes resistant to Liberty 200 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 200 or other Group N herbicides.

Since occurrence of resistant weeds is difficult to detect prior to use, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Liberty 200 to control resistant weeds.

Do not rely exclusively on Liberty 200 Herbicide for weed control. To minimise the risk of weeds developing resistance to Liberty 200 use in conjunction with herbicides from alternative mode of action groups and/or non-chemical weed control measures such as chipping and inter-row cultivation.

**PRECAUTIONS****Minimum recropping intervals apply for crops following Liberty 200 application.**

For advice on crops not listed below, contact the manufacturer, Bayer CropScience Pty Ltd.

<b>Crop</b>	<b>Minimum recropping interval</b>
Cotton	24 hours

**Re-entry period**

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

**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 Liberty Link<sup>®</sup> cotton varieties) or allow drift onto desirable plants, as damage may occur.

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

DO NOT contaminate streams, rivers or waterways with this product or the used container.

**STORAGE AND DISPOSAL**

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

**20 litre pack**

Triple or preferably pressure 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Do not re-use empty container for any other purpose.

**100 litre pack**

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. This container remains the property of Bayer CropScience Pty Ltd.

**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 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 (telephone 13 11 26).

**MATERIAL SAFETY DATA SHEET**

Additional information is listed in the Material Safety Data Sheet, which may be obtained from [www.bayercropscience.com.au](http://www.bayercropscience.com.au).

**EXCLUSION OF LIABILITY**

This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

Liberty® and Liberty Link® are Registered Trademarks of Bayer.

APVMA Approval No.: 61965/0907

FOR 24 HOUR SPECIALIST ADVICE  
IN EMERGENCY ONLY  
PHONE 1800 033 111

**DIRECTIONS FOR USE****Restraints**

**DO NOT apply to cotton varieties other than Liberty Link cotton.**

DO NOT apply by aircraft.

DO NOT apply by mister.

DO NOT apply when rain is expected within 6 hours or irrigate until at least 6 hours after application.

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

DO NOT apply to weeds under stress, for example due to very dry, very wet, frosty or nutrient deficient conditions or as a result of windblast, insect damage, disease or a previous herbicide treatment.

CROP	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Liberty Link cotton	<b>Control of:</b> Annual polymerica Bellvine Bladder ketmia Caltrop Dwarf amaranth Field bindweed (European bindweed) Paddy melon Peach vine Red pigweed Rhyncho (Rhyncosia) Sesbania pea Sowthistle (Milk thistle) Volunteer cotton (other than Liberty Link cotton) Yellow vine <b>Suppression of:</b> Chinese lantern (Wild gooseberry) Noogoora burr complex	2-6 leaf	3.75 L/ ha in a minimum of 100 L water	Apply to actively growing weeds.  Good coverage is essential.  Refer to <b>Climatic Conditions</b> section of the label.  Do not apply more than 3 applications per season.  Liberty 200 Herbicide may cause minor and transient spotting on leaves which are directly contacted by spray applications. This has not been shown to have any impact on crop growth and development.

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

**APPLICATION OF LIBERTY 200 HERBICIDE TO COTTON VARIETIES OTHER THAN LIBERTY LINK COTTON WILL RESULT IN SEVERE CROP INJURY OR DEATH OF THE CROP.**

**WITHHOLDING PERIODS****Harvest**

**DO NOT APPLY LATER THAN 10 WEEKS BEFORE HARVEST.**

**Grazing**

**DO NOT GRAZE OR CUT TREATED VEGETATION FOR STOCK FEED.**

**DO NOT FEED COTTON TRASH TO LIVESTOCK.**

**Export of Treated Produce**

Maximum Residue Limits (MRLs) may be lower or not be established in export markets for cottonseed. Glufosinate-ammonium residues are not found in cottonseed oil when Liberty 200 Herbicide is used according to label directions. Check with Bayer CropScience Pty Ltd prior to using this product if the cottonseed is destined for export.