

Barnstorm[®]

HERBICIDE

ACTIVE CONSTITUENT:

285 g/L CYHALOFOP BUTYL

SOLVENT:

607 g/L LIQUID HYDROCARBON

GROUP A HERBICIDE

For post-emergent control of grass weeds in rice as specified in the Directions for Use.

Pack Size: 10 L

CAUTION

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

FIRST AID

If swallowed, do NOT induce vomiting. Give a glass of water.
If poisoning occurs contact a doctor or Poisons Information Centre.
Phone: *Australia* 13 11 26.

SAFETY DIRECTIONS

Will damage the eyes • Will irritate the nose and throat and skin • Avoid contact with eyes and skin • Do not inhale vapour • If product in eyes, wash it out immediately with water • Wash hands after use • When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, goggles, elbow-length butyl rubber gloves and a disposable fume mask covering mouth and nose • After each day's use, wash gloves, goggles and contaminated clothing.

SAFETY DATA SHEET

Additional information is listed on the Safety Data Sheet for **BARNSTORM[®] HERBICIDE** which is available from Corteva Agriscience on request.
Call Customer Service Toll Free on 1-800 700 096 or visit www.corteva.com.au

**EMERGENCY RESPONSE
(ALL HOURS)**
RING FROM ANYWHERE IN
AUSTRALIA
1800 370 754
(LOCAL CALL FEE ONLY)

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



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Visit us at corteva.com.au

DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply if crop or weeds are stressed due to periods of extreme cold, dry conditions, poor nutrition or previous herbicide treatment as a reduced level of control may result.

DO NOT apply directly into floodwater either by SCWIRT (Soluble Chemical Water Injection into Rice Technique) or the aerial Bickley Boom. Apply only as a foliar spray.

DO NOT treat weeds if mud, cracks or firm soil have appeared throughout fields prior to treatment, as poor control will result due to moisture stress.

DO NOT apply if rain is likely within 2 hours after application.

CROP/SITUATION: Barnstorm Herbicide may be applied to any direct seeded rice crop (combine sown, sodseeded, dry broadcast sown followed by flooding and aerial sown into flooded bays) from the 1-2 leaf stage up to late tillering of the rice . Within these rice stages, choose the rate and timing as required by the growth stage of the target weeds (<i>see below</i>).			
WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (L/ha)	CRITICAL COMMENTS
Always use Integrated Weed Management (IWM) practices for best weed control and to limit development of weed resistance. For best IWM, the application of alternate mode of action grass herbicides as a pre-plant, pre-emergence and/or at sowing treatment prior to Barnstorm is strongly recommended.			
Barnyard grasses (<i>Echinochloa</i> spp.) Silver top (<i>Leptochloa fusca</i>) <i>Panicum</i> spp. (including Coolah grass <i>Panicum coloratum</i> and Sweet panic <i>Panicum gilvum</i>)	3 to 5 leaf	0.75 - 1 L/ha + 1 L/ha Uptake™ Spraying Oil	Barnstorm Herbicide must be applied directly to the foliage of actively growing weeds by aircraft or ground boom equipment. Apply post-flooding. Water must be at least 1-2 cm deep in fields at spray time to ensure active growth of weeds and sufficient exposure of weeds to allow coverage by the foliar spray. See under General Instructions – Water Management . Commence reflooding after 2 hours and fill as soon as possible to limit germination of new weeds and maximise weed control. Only use 0.75L/ha for 3-5 leaf weeds when light weed infestations, excellent soil moisture and good crop competition is present. Use the 1L/ha rate if any of these conditions are not present at treatment time.
	1 to 2 tillers (early tillering)	1 L/ha + 1 L/ha Uptake™ Spraying Oil	
Barnyard grasses (<i>Echinochloa</i> spp.)	3 to 4 tillers (mid tillering)	1-1.5 L/ha + 1 L/ha Uptake™ Spraying Oil	Use 1.5 L/ha to treat larger weeds.
<i>Only weed suppression (reduced seedset) will be obtained if Barnstorm is applied to advanced grass weeds (5 tiller or larger), high weed densities and/or moisture stressed weeds.</i>			

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

HARVEST WITHHOLDING PERIOD:

NOT REQUIRED WHEN USED AS DIRECTED.

GRAZING WITHHOLDING PERIOD:

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION.

DRAINAGE WITHHOLDING PERIOD:

DO NOT drain water into regional drains within 7 days after Barnstorm Herbicide application or as defined by the local irrigation authority, whichever is the greater time period.

RESISTANT WEEDS WARNING

GROUP A HERBICIDE

Barnstorm Herbicide is a member of the aryloxyphenoxy propionate group of herbicides. The product has the acetyl CoA carboxylase inhibitor mode of action. For weed resistance management Barnstorm Herbicide is a Group A herbicide.

Some naturally occurring weed biotypes resistant to the product and other Group A 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 the product or other Group A herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Dow AgroSciences accepts no liability for any losses that may result from the failure of the product to control resistant weeds.

GENERAL INSTRUCTIONS

Barnstorm Herbicide is a post-emergence foliar herbicide for selective control of specific grass weeds in drilled and water seeded rice. Barnstorm Herbicide does not provide pre-emergence or soil residual weed control. Only actively growing grass weeds already emerged at the time of treatment are controlled. Barnstorm Herbicide will not control broadleaf weeds or sedges.

WATER MANAGEMENT

There must be at least 1 to 2 cm of water in fields at spraying to ensure active growth of weeds while allowing adequate exposure of weeds to the foliar spray. Use steel wheeled tractor, all wheel drive motorbike (or similar) ground boom sprayers or aeroplanes to ensure Barnstorm is applied when water is present in fields to be treated. For 3-5 leaf weeds, ensure that 75% of foliage is exposed above floodwater. For 1-2 tiller weeds, tillers and 75% of foliage must be exposed above floodwater. **DO NOT** treat weeds if mud, cracks or firm soil have appeared throughout fields prior to treatment, as poor control will result due to moisture stress. To limit germination of new weeds and maximise weed control, commence reflooding no later than two hours after application.

MIXING

Add water to the spray tank to 10 cm above the level of agitation and ensure the agitation device is working vigorously. If tank mixing, firstly add any soluble liquid formulations and allow agitation for approximately one minute. Then add Barnstorm at the point where agitation is strongest. Allow further agitation for one minute. Half fill the spray tank. If using wettable powder or water dispersible granules, or other emulsifiable concentration formulations (e.g. Lorsban™ 500 EC Insecticide) these should be added after the Barnstorm to the half-full spray tank, ensuring vigorous agitation. Finally add Uptake™ Spraying Oil and continue filling the tank to the required volume, maintaining agitation at all times. Only mix sufficient solution for immediate use. Barnstorm and any other tank mixes should be applied immediately for best results.

APPLICATION

Aerial

Application conditions – **DO NOT** apply under hot, dry conditions which could adversely affect spray deposition on the target weeds.

Spray volume – Apply by an accurately calibrated aircraft using a minimum water volume of 40 L/ha for early season application to pretilled weeds when rice canopy is open and light. Later in the season when rice canopy is closed over and heavy, use 80 L/ha or more to achieve effective spray coverage of tillered weeds.

Spray quality – Aim to apply medium quality spray (BCPC/ASAE S-572), throughout the season.

Mixing for odd shaped rice bays – ensure the area to be treated receives the full recommended rate after allowing for spray out of headlands, banks or other obstacles and clean up runs. To achieve this Barnstorm Herbicide rate may need to be increased by 10%.

Swath width – Do not exceed the optimum swath width recommended for the particular make and model of the aircraft to minimise the likelihood of striping and poorer control.

Precautionary Statement: DO NOT use human flaggers/markers unless they are protected by engineering controls such as enclosed cabs.

Ground

Apply using a vehicle mounted boom to enable application when floodwater is present, using a minimum water volume of 100 L/ha. Sprayers should aim to apply medium to coarse quality spray based on ASAE standard S-572.

COMPATIBILITY

Barnstorm Herbicide can be tank mixed with Lorsban™ 500 EC Insecticide or with the herbicide pendimethalin.

DO NOT apply Barnstorm as a tank mix with MCPA, Basagran® M60, bensulfuron methyl or carfentrazone as reduced grass weed control will occur. If these products are to be used in the same spray program as Barnstorm, separate applications by at least 7 days.

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® Basagran M60 Herbicide Registered trademark of BASF Australia Ltd

CLEANING SPRAY EQUIPMENT

If broadleaf herbicides, particularly sulfonylureas, have been used in the spray equipment at any time prior to use of Barnstorm, particular care should be taken to follow the directions on the relevant broadleaf herbicide label for equipment cleaning, or damage to the rice may occur. After using Barnstorm, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean any filters in the tank, pump, line and nozzles.

To rinse: After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

To decontaminate: Before spraying other cereals, maize, sorghum or other sensitive crops, wash the tank and rinse the system as above. Then quarter fill the tank and add an alkali detergent at 500 mL/100 L of water or the powder equivalent

at 500 g/100 L of water, and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain. Chlorine-based cleaners are not recommended.

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

RE-ENTRY PERIOD

DO NOT allow entry into treated areas for irrigation and scouting until the spray has dried unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Hand harvesting should not be allowed for 5 days after product application. Clothing must be laundered after each day's use.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Other cereals (eg. maize and sorghum) and grasses (eg. seed crops, turf) are highly sensitive to damage from Barnstorm Herbicide, as may be non-target native grasses/vegetation. Maintain a buffer zone of at least 50 m downwind from these for aerial applications.

Peaches and nectarines are very sensitive to spotting from spray drift. Ensure that these crops are more than 5 kms downwind before spraying Barnstorm Herbicide by air and 200 m downwind when applying by ground.

DO NOT rotate treated land to crops other than rice for 3 months after application.

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.

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crop for stock food except as specified under withholding periods.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Barnstorm Herbicide is toxic to aquatic organisms.

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

DO NOT drain water into regional drains within 7 days after Barnstorm Herbicide application or as defined by the local irrigation authority, which ever is the greater time period.

STORAGE AND DISPOSAL

Store in the closed original container in a cool, well-ventilated area.

DO NOT store for prolonged periods in direct sunlight.

DO NOT store near feedstuffs, fertilisers or seeds.

This container can be recycled if it is clean, dry, free of visible residues and has the **drumMUSTER** logo visible. Triple or pressure rinse container 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 for appropriate disposal 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.

SMALL SPILL MANAGEMENT

Wear protective equipment (see SAFETY DIRECTIONS section). Apply absorbent material such as earth, sand, cat litter or clay granules to the spill. When absorption is complete, sweep up material and contain in a refuse vessel for disposal (see STORAGE AND DISPOSAL section). If necessary wash the spill area with an alkali detergent and water and absorb this wash liquid for disposal as described above.

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Made in New Zealand

APVMA Approval No: 58613/59089

Hazard and precautionary statements according to classification under GHS (Globally Harmonised System of Classification and Labelling)

Store locked up. Combustible liquid. Keep away from flames, hot surfaces – no smoking. In case of fire use water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers, foam or alcohol resistant foams (ATC type). Suspected of causing cancer*. If exposed or concerned: Get medical advice/attention. Causes serious eye irritation. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. May be fatal if swallowed and enters airways. If swallowed immediately call a POISONS CENTRE or doctor. Do NOT induce vomiting.

*this classification is derived from naphthalene, an ingredient in the hydrocarbon solvent.

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