



LIGHTNING®

HERBICIDE

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Active constituent: 525 g/kg IMAZETHAPYR
175 g/kg IMAZAPYR

GROUP **B** HERBICIDE

For the early post-emergence control of certain annual grass and broadleaved weeds as part of the CLEARFIELD® Production System for maize, as specified in the DIRECTIONS FOR USE table.

FEATURES

Early post-emergence application provides knockdown and residual control of both annual grass and broadleaf weeds.

BENEFITS

Designed specifically for use in currently available maize varieties with CLEARFIELD Technology.

MODE OF ACTION

LIGHTNING Herbicide is a Group B Herbicide which acts via the inhibition of plant specific enzymes required for amino acid and protein synthesis. This in turn inhibits DNA synthesis, resulting in prevention of cell growth. Weeds which are not killed will often show characteristic 'microfoliation' and will not compete with the crop.

PACK SIZES

1 kg

<i>U.N. Number</i>	<i>Correct Shipping Name</i>	<i>Class</i>	<i>Subsidiary Risk</i>
Not Applicable	Not Applicable	Not Applicable	Not Applicable
<i>HAZCHEM Code</i>	<i>Poisons Schedule</i>	<i>Emergency Guide</i>	<i>Packaging Group</i>
Not Applicable	5	Not Applicable	Not Applicable

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



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For the early post-emergence control of certain annual grass and broadleaved weeds as part of the CLEARFIELD® Production System for maize, as per the DIRECTIONS FOR USE table.

GENERAL INSTRUCTIONS

LIGHTNING Herbicide is for use in maize varieties with CLEARFIELD Technology only. Varieties with CLEARFIELD Technology are those which have been bred specifically to be tolerant to LIGHTNING Herbicide.

LIGHTNING is an early-post-emergence herbicide with some residual soil activity under good soil moisture conditions. Residual effects on weeds can be variable, where dry soil surface conditions follow the application of LIGHTNING, because the herbicide is not freely available to the weeds. Best weed control will be achieved when application is made to young weeds. The product must be mixed with Hasten or Kwickin as per the Directions for Use. Treated weeds will either die or will remain stunted and will not compete with the crop.

MIXING

LIGHTNING Herbicide is a water dispersible granule formulation. Part-fill the spray tank with water, then with agitator running, add the required amount of product, then fill the tank with water. When tank mixing this product with other recommended compatible products, first add the other product to the tank and mix thoroughly before adding this product.

APPLICATION

Do NOT apply by aircraft.

Apply in a minimum 50 L water per hectare.

EQUIPMENT CLEAN-UP

Thoroughly flush all spray equipment with water following the use of LIGHTNING and before use with other products.

COMPATIBILITY

LIGHTNING is compatible with FASTAC® 100, FASTAC Duo, chlorpyrifos, dimethoate, omethoate, endosulfan and 2,4-D.

RESISTANT WEEDS WARNING

GROUP **B** HERBICIDE

LIGHTNING Herbicide is a member of the Imidazolinone group of herbicides. The product has the inhibitors-of-acetolactate-synthase (ALS) mode of action. For weed resistance management, the product is a Group B herbicide. Some naturally-occurring weed biotypes resistant to the product and other Group B 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 this product or other 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) PROGRAMME

A detailed programme has been developed that outlines an integrated weed management approach, designed to optimise the performance of the CLEARFIELD Production System and minimise the potential for the development of herbicide resistance in weed populations.

Before using this product, the BMP programme related to this use should be consulted. Implementation of the integrated weed management approach outlined in the BMP is an essential part of herbicide resistance management.

FOLLOW CROPS

Under conditions which do not favour breakdown of this product, carry-over soil residues can affect susceptible follow crops. As environmental and agronomic factors make it impossible to eliminate all risks associated with this product, rotational crop injury is always possible. The following minimum re-cropping intervals (months after application) should be observed.

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Irrigated only:**MONTHS AFTER APPLICATION**

0	5	10	18
Maize varieties with CLEARFIELD Technology ONLY	chick peas	** maize	all other crops
canola varieties with CLEARFIELD Technology ONLY	lucerne	(except for varieties with CLEARFIELD Technology; see 0 months)	(providing rainfall and irrigation Technology 2000 mm)
mung beans	pasture legumes		
peanuts	* barley	** sorghum	
soybeans	* wheat		
wheat varieties with CLEARFIELD Technology ONLY	(except for varieties with CLEARFIELD Technology; see 0 months)		

* Do NOT plant these crops unless interim moisture (rainfall plus irrigation) from application to sowing is at least 500 mm.

** Do NOT plant these crops unless interim moisture (rainfall plus irrigation) from application to sowing is at least 800 mm.

Dryland only:**MONTHS AFTER APPLICATION**

0	10	15	22	27
Maize varieties with CLEARFIELD technology ONLY	** maize	chick peas	cotton	all other crops
canola varieties with CLEARFIELD Technology ONLY	(except for varieties with CLEARFIELD Technology; see 0 months)	lucerne	maize	(providing rainfall exceeds 2000 mm)
peanuts	** sorghum	lupins	(except for varieties with CLEARFIELD Technology; see 0 months)	
mung beans		pasture legumes		
soybeans		* barley		
wheat varieties with CLEARFIELD Technology ONLY		* wheat		
			sorghum	
			sunflower	

* Do NOT plant these crops unless interim rainfall from application to sowing is at least 500 mm.

** Do NOT plant these crops unless interim rainfall from application to sowing is at least 800 mm.

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 spray within 50 m of wetlands or waterways.

Crop safety

This product may, in some circumstances, lead to transient crop yellowing and temporary slowing of growth 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 maize variety other than specified certified maize varieties with CLEARFIELD Technology. Severe crop damage will result to conventional maize varieties.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Do NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

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

SAFETY DIRECTIONS

Will damage eyes. Will irritate skin. Avoid contact with eyes and skin. When preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. If product in eyes, wash it

out immediately with water. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Telephone 131126 Australia-wide.

MSDS

Additional information is listed in the Material Safety Data Sheet.

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 Trade Practices Act 1974 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.

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DIRECTIONS FOR USE

RESTRAINTS: Apply ONLY to the certified maize varieties with CLEARFIELD Technology.
 Do NOT apply to any other maize varieties.
 Do NOT apply to crops which are stressed due to conditions such as waterlogging, frost, disease or nutritional disorders.
 Do NOT apply by aircraft.

CROP	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
Maize varieties CLEARFIELD technology only; Pacific Hycorn+ 62IT and 53IT, Pacific PAC 338, Pioneer 3395IR	Boggabri weed (<i>Amaranthus mitchellii</i>), turnip weed (<i>Rapistrum rugosum</i>), * anoda weed (<i>Anoda cristata</i>), * barnyard grass/awnless barnyard grass (<i>Echinochloa</i> spp.), * caustic creeper (<i>Euphorbia drummondii</i>), * crowsfoot grass (<i>Eleusine indica</i>), * Johnson grass (<i>Sorghum halepense</i>) (seedling only)	100 g/ha plus Hasten ^{TM1} or Kwickin ^{TM2} 1.0 L/ 100 L spray volume	Apply to crops in the 2 to 6 leaf with stage. Apply early post-emergence to specifically at actively growing weeds in the 2 to 4 leaf stage. Weeds may not be totally controlled but populations will be significantly reduced and surviving plants will generally be severely retarded. Good crop growth will aid weed control.
	Ground cherry (<i>Physalis ixocarpa</i>), wild gooseberry (<i>Physalis minima</i>), * nutgrass (<i>Cyperus rotundus</i>)	125 g/ha plus Hasten or Kwickin at 1.0 L/ 100 L spray volume	* Surviving plants will generally be retarded and will not compete with the crop. Do NOT apply more than once per cropping season. Populations of weeds resistant to Group B herbicides exist in the field and will not be adequately controlled by LIGHTNING Herbicide.

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

WITHHOLDING PERIODS:

MAIZE WITH CLEARFIELD TECHNOLOGY: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION.

HARVEST FOR GRAIN: NOT REQUIRED WHEN USED AS DIRECTED.

THIS PRODUCT IS NOT CONSIDERED TO BE A DANGEROUS GOOD UNDER THE AUSTRALIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS BY ROAD AND RAIL

FOR SPECIALIST ADVICE IN AN
EMERGENCY ONLY
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Acknowledgments:

Collated by HerbiGuide. Phone 08 98444064 for more information.