

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



HERBICIDE

Active Constituents: 200 g/kg BUTAFENACIL
520 g/kg TRIASULFURON

For the knockdown, pre-emergent and residual control of various weeds prior to planting wheat as per Directions for Use

GROUP B | G HERBICIDE

APVMA Approval No: 53545/1500g/1203 Pack size: 1.5 kg

GENERAL INSTRUCTIONS

LOGRAN B-POWER is a water dispersible granular herbicide for the knockdown and pre-plant, incorporated by sowing, control of annual ryegrass, paradoxa grass and certain broadleaf weeds in wheat.

Crops other than wheat, barley, oats, triticale and cereal rye can be very sensitive to low soil concentrations of LOGRAN B-POWER, thus prior to using the product, careful consideration should be given to crop rotation plans.

Resistant Weeds Warning

LOGRAN B-POWER Herbicide is a member of the sulfonyleurea and pyrimidiniones groups of herbicides. The product has the inhibitors of acetolactase synthase (ALS) and protoporphyrinogen oxidase modes of action. For weed resistance management, the product is a Group B and G herbicide.

Some naturally-occurring weed biotypes resistant to the product and other Group B and G 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 and G herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Syngenta Crop Protection Pty Limited accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

Advice as to strategies and alternative treatments that can be used should be obtained from your local supplier, consultant, local Department of Agriculture, Primary Industries Department or a Syngenta representative.

Mixing

DO NOT mix, load or apply this product within 50 m of any well, sink hole, intermittent or perennial stream.

LOGRAN B-POWER is a water dispersible granular herbicide which mixes readily with water and is applied as a spray.

1. Partly fill the spray tank with water.
2. Start the agitation.
3. Add the correct amount of product to the spray tank with the agitation system running.
4. Continue agitation while topping up the tank with water and while spraying.
5. Use the spray mix within 24 hours of preparation.

Mixing Order

Some products may react with other products if they are not mixed in the correct order. The general mixing order of products should be:

1. Water conditioners or buffers
2. Water dispersible granules (WG)
3. Wettable powders (WP)
4. Flowable or suspension concentrates (SC)
5. Emulsifiable concentrates (EC)
6. Water based or soluble concentrates
7. Oils and wetters

It is important to ensure that each individual component of the tank mix is fully dissolved and in solution before the next product is added to the tank mix, otherwise mixing problems may occur.

Application

Spray equipment should be carefully calibrated before use. Complete coverage of weed seedling is required for maximum knockdown effect. A spray volume of 50 to 100 L/ha is recommended.

Cleaning Equipment After Application

Thoroughly clean the sprayer using the following procedure when you have finished spraying highly active materials such as sulfonyleurea and butafenacil products.

1. Start with a thoroughly cleaned sprayer before beginning the next job.

Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using this procedure. Wear appropriate protective clothing.

2. Flush tank, hoses, boom and nozzles with clean water.
3. Prepare a cleaning solution of 300 mL of household chlorine bleach (containing 4% chlorine) per 100 L of water. Ensure bleach used is fresh as it can degrade significantly over time resulting in a reduction in cleaning ability.
4. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface and lid.
5. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system and in cases where there is the possibility of heavy build up of residues, the cleaning solution may need to be left in the tank overnight to ensure adequate decontamination of the tank.
6. Flush hoses, spray lines and nozzles for at least 1 minute with the cleaning solution.
7. Dispose of rinsate from steps 1 to 5 in an appropriate manner.
8. **Repeat steps 2 to 5.**
9. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures. Be careful with filters, as they can be a main source of contamination.
10. Rinse the complete spraying system with clean water.

The above method is only effective if the cleaning solution comes into contact with every surface or contact point that may contain even minute sulfonyleurea or butafenacil herbicide residues. In some boom sprayers this may not be physically possible and hence it may be advisable to use a different boom sprayer, that has not been used to spray sulfonyleurea or butafenacil herbicides, when spraying sensitive crops such as legumes and especially canola.



CROP ROTATION GUIDELINES

Unless otherwise specified (see table below), wheat, barley, oats, triticale and cereal rye can be planted the following season without restriction.

For other specified crops the LOGRAN B-POWER treated area may be replanted after the interval indicated in the table below. These recommendations are made on the assumption that LOGRAN B-POWER is applied to a wheat crop that reaches maturity in the season of application.

Soil pH (1:5 Soil:Water suspension method)	State	Replanting Interval	Minimum rainfall requirements between application and sowing the following crop	Crop
6.5 or less	Qld, NSW, Vic, SA, WA only	12 months	300 mm	Field Peas, Linseed, Lucerne, Lupins, Medics†, Subterranean Clover †, Faba Beans, Chickpeas, Canola
	Qld, NSW, only	15 months	700 mm	Sorghum, Maize, Soybean, Cotton, Cowpea, Mung Bean
		18 months	900 mm	Sunflowers
6.6 to 7.5	Qld, NSW only	12 months	500 mm	Chickpeas, Canola
		15 months	700 mm	Sorghum, Maize, Soybean, Cotton, Cowpea, Mung Bean
		18 months	900 mm	Sunflowers
	Vic, SA, WA only	22 months	500 mm	Field Peas, Linseed, Lucerne, Lupins, Medics†, Subterranean Clover†, Faba Beans, Chickpeas, Canola, Sorghum, Maize, Soybean, Cotton
7.6 to 8.5	Vic, SA only	12 months	250 mm	Barley, Oats, Cereal Rye for grain crops
			300 mm	Barley, Oats, Cereal Rye for hay crops
	Qld, NSW only	12 months	500 mm	Chickpeas, Canola
		18 months	700 mm	Sorghum, Maize, Soybean, Cotton, Cowpea, Mung Bean
Vic, SA, WA only	24 months	700 mm	Field Peas, Linseed, Lucerne, Lupins, Medics†, Subterranean Clover†, Faba Beans, Chickpeas, Canola, Sorghum, Maize, Soybean, Cotton	
8.6 and above	Vic., SA only	12 months	250 mm	Barley, Oats, Cereal Rye for grain crops
			300 mm	Barley, Oats, Cereal Rye for hay crops
	Qld, NSW, Vic, SA, WA only	24 months	700 mm	Field peas, Linseed, Lucerne, Lupins, Medics†, Subterranean Clover†, Faba Beans, Chickpeas, Canola, Sorghum, Maize, Soybean, Cotton

† Includes natural regeneration of Subterranean Clover and Medics. For all other crops seek advice from a Syngenta representative.

Compatibility

LOGRAN B-POWER is compatible with Spray.Seed, Touchdown and glyphosate.

When using a tank mix of LOGRAN B-POWER and Spray.Seed, add LOGRAN B-POWER with constant agitation, to approximately half the total volume of water to be used.

Ensure that the LOGRAN B-POWER is fully dispersed.

Add the Spray.Seed, fill the spray tank to full volume with water and mix thoroughly.

Apply tank mix immediately, under constant agitation.



PRECAUTIONS

Some crop yellowing or crop retardation may occur where stress factors such as water logging, drought, excessive soil acidity or alkalinity, nutrient or trace element deficiency, disease - Rhizoctonia, Take-All, cereal cyst nematodes or soil insects are present or occur following application.

Special care should be taken with regard to the application of LOGRAN B-POWER to durum wheat varieties as these may be more sensitive where the above stresses are present. DO NOT apply LOGRAN B-POWER within one day of sowing of durum wheat varieties. In these situations crop recovery will be rapid provided the stress factors do not continue exerting a negative effect on the crop's growth.

Crop retardation may also occur in some instances where considerable late summer/early autumn weed growth occurs. Weeds such as Goosefoot, Chenopodium spp. can release herbicidally active compounds into the soil.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply on or near shrubs, trees, lawns or crops other than wheat.

DO NOT apply, drain or flush equipment on or near trees or other plants, where their roots may extend or in situations where by movement of soil, or seepage, absorption of the herbicide may occur.

DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift over nearby susceptible plants or crops, cropping lands or pastures.

DO NOT allow spray to drift onto adjacent crops and non-target plants.

DO NOT allow spray to drift onto adjacent fallow land.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

This product is very highly toxic to algae and aquatic plants. DO NOT apply this product within 50 m of natural or impounded lakes, dams or waterways.

DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause drift of this product or spray mix onto adjacent areas, particularly wetlands, waterbodies or watercourses.

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

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well ventilated area out of direct sunlight.

Rinse containers before disposal. Add rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site. Dispose of at 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 irritate the eyes and skin. Avoid contact with eyes and skin. If product gets on skin, immediately wash area with soap and water. Wash hands after use. When opening container, preparing and using the prepared spray, wear:

- cotton overalls buttoned to the neck and wrist (or equivalent clothing);
- a washable hat; and
- elbow length PVC gloves.

After each day's use wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126.

MATERIAL SAFETY DATA SHEET

If additional hazard information is required, refer to the Material Safety Data Sheet. For a copy phone 1800 067 108 or visit our website at www.syngenta.com.au

MANUFACTURER'S WARRANTY AND EXCLUSION OF LIABILITY

Syngenta has no control over storage, handling and manner of use of this product. Where this material is not stored, handled or used correctly and in accordance with directions, no express or implied representations or warranties concerning this product (other than non-excludable statutory warranties) will apply. Syngenta accepts no liability for any loss or damage arising from incorrect storage, handling or use.

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DIRECTIONS FOR USE

Pre-sowing application only.

- Restraints:** DO NOT apply if wheat will be undersown with legumes.
 DO NOT use if any other Group B (ALS Inhibitor) herbicide has been or is intended to be used during the current season.
 Apply no more than 2 Group B herbicides in any 4 year period on the same paddock.
 DO NOT tank mix with TOUCHDOWN® B-POWER™.
 DO NOT use if TOUCHDOWN B-POWER has been used in the same season.
 DO NOT apply by aircraft.
 DO NOT apply if heavy rainfall that is likely to cause runoff is forecast or irrigation is to take place within 48 hours of application.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Wheat	<p>Knockdown control: Annual Ryegrass (<i>Lolium rigidum</i>), Capeweed (<i>Arctotheca calendula</i>), Clover (<i>Trifolium spp.</i>), Doublegee, Three Cornered Jack or Spiny Emex (<i>Emex australis</i>), Medic (<i>Medicago spp.</i>), Sowthistle (<i>Sonchus oleraceus</i>), Volunteer Faba Beans (<i>Vicia faba</i>) and Field Peas (<i>Pisum sativum</i>) Wild Oats (<i>Avena fatua</i>), Wild Radish (<i>Raphanus raphanistrum</i>)</p> <p>Residual control: Annual Ryegrass (<i>Lolium rigidum</i>), African Turnip Weed (<i>Sisymbrium thellungii</i>), Ball Mustard (<i>Neslia paniculata</i>), Black Bindweed or Climbing Buckwheat (<i>Fallopia convolvulus</i>), Burr Medic (<i>Medicago spp.</i>), Capeweed (<i>Arctotheca calendula</i>), Common Cotula (<i>Cotula australis</i>), Corn Gromwell, White Ironweed or Sheepweed (<i>Buglossoides arvensis</i>), suppression of Crassula (<i>Crassula sieberana</i>), Deadnettle (<i>Lamium amplexicaule</i>), Denseflower Fumitory (<i>Fumaria densiflora</i>), Hedge Mustard (<i>Sisymbrium officinale</i>), Indian Hedge Mustard (<i>Sisymbrium orientale</i>), Lesser Swinecress (<i>Coronopus didymus</i>), London Rocket (<i>Sisymbrium irio</i>), Matricaria (<i>Matricaria matricarioides</i>), suppression of Mexican Poppy (<i>Argemone mexicana</i>), New Zealand Spinach (<i>Tetragonia tetragonioides</i>), Paradoxa Grass (Annual Phalaris) (<i>Phalaris paradoxa</i>), Paterson's Curse (<i>Echium plantagineum</i>), Prickly Lettuce (<i>Lactuca serriola</i>), Rough Poppy (<i>Papaver hybridum</i>), Shepherd's Purse (<i>Capsella bursa-pastoris</i>), suppression of Skeleton Weed (<i>Chondrilla juncea</i>), Slender Celery (<i>Apium leptophyllum</i>), Smallflower Fumitory (<i>Fumaria parviflora</i>), suppression of Soursob (<i>Oxalis pes-caprae</i>), Stagger Weed (<i>Stachys arvensis</i>), Stemless Thistle (<i>Onopordum acaulon</i>), Turnip Weed (<i>Rapistrum rugosum</i>), suppression of Variegated Thistle (<i>Silybum marianum</i>), Vetch (<i>Vicia spp.</i>), Volunteer Chickpeas (<i>Cicer arietinum</i>), Faba Beans (<i>Vicia faba</i>) and Field Peas (<i>Pisum sativum</i>), Wards Weed (<i>Vella annua</i>), Wild Turnip (<i>Brassica tournefortii</i>), Wireweed (<i>Polygonum aviculare</i>), suppression of Wild Radish (<i>Raphanus raphanistrum</i>), Yellow Burrweed (<i>Amsinckia</i>) (<i>Amsinckia spp.</i>)</p>	50 g Add a recommended adjuvant at label rates	<p>If weeds are present prior to application, it is recommended to tank mix Logran B-POWER with a compatible knockdown herbicide (eg. Spray.Seed® or Touchdown) to ensure effective knockdown control. LOGRAN B-POWER provides knockdown control of some weeds (listed in bold) which have just emerged (up to 2 leaf stage).</p> <p>In conservation tillage situations, or where larger weeds (greater than 2 leaf stage) are present apply LOGRAN B-POWER as a tank mixture with the recommended rate of a knockdown herbicide. If the total green matter exceeds 30% groundcover apply a separate application of a knockdown herbicide prior to application of LOGRAN B-POWER.</p> <p>Always add an adjuvant such as Hasten* or a non ionic wetter at recommended rates. On large weeds and in less than ideal conditions the use of Hasten in preference to a non ionic wetter is recommended.</p> <p>For best results apply to moist soil prior to sowing and incorporate by the sowing operation. Application should not be made to ridged or excessively cloddy soil. For best results apply to moist soil when follow up rain is likely to occur within 7 to 10 days.</p> <p>LOGRAN B-POWER will provide good control of volunteer grain legumes, however a small proportion of plants may survive and require an overspray to eliminate the potential for grain contamination. For Skeleton Weed a significant degree of control will be achieved on soil types of a predominantly sandy clay loam mixture with a pH greater than 8. Best control is observed where Skeleton Weed germinates in the very early stages of the crop. Surviving plants will be stunted.</p> <p>For best results for Paradoxa Grass control apply to dry soil before the sowing rain.</p>

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

WITHHOLDING PERIODS:

Grazing: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 WEEKS AFTER APPLICATION.

Harvest: NOT REQUIRED WHEN USED AS DIRECTED.