



Product Name: BOBCAT I-MAXX HERBICIDE

APVMA Approval No: 69698 / 120390

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| Label Name: | BOBCAT I-MAXX HERBICIDE |
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| Signal Headings: | CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING |
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| Constituent Statements: | 125 g/L HEXAZINONE 25 g/L IMAZAPIC present as the AMMONIUM SALT |
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| Mode of Action: | GROUP B C HERBICIDE |
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| Statement of Claims: | Crop: Sugarcane Controls/Suppresses: A wide range of annual and perennial grasses and broadleaf weeds as specified in the Directions for Use table. |
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| Net Contents: | 5 to 1000 L |
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| Restraints: | DO NOT apply to fields where the slope exceeds 5%. DO NOT apply Bobcat i-MAXX and any other product containing imazapic or hexazinone more than once per calendar year. DO NOT apply in the planting furrow in plant cane. DO NOT use equipment or spraying methods which cause spray or spray drift to contact the growing point of the sugarcane. DO NOT spot spray more than 5% of the total farm area. DO NOT apply on light sandy soils as injury to cane may result. DO NOT apply to soils saturated with water. DO NOT apply by aircraft. |
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| Directions for Use: | This section contains file attachment. |
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| Other Limitations: | |
| Withholding Periods: | Harvest: NOT REQUIRED WHEN USED AS DIRECTED. Grazing: DO NOT GRAZE CROP OR SPRAYED VEGETATION, OR CUT FOR STOCKFOOD FOR 6 WEEKS AFTER APPLICATION. |
| Trade Advice: | |
| General Instructions: | This section contains file attachment. |
| Resistance Warning: | BOBCAT i-MAXX Herbicide contains members of the imidazolinone and triazinone groups of herbicides. BOBCAT i-MAXX has the inhibitors of acetolactate-synthase (ALS) and inhibitor of photosynthesis at photosystem II modes of action. For weed resistance management BOBCAT i-MAXX contains Group B and C herbicides. Some naturally occurring weed biotypes resistant to BOBCAT i-MAXX and other Group B and C 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 BOBCAT i-MAXX or other Group B or C herbicides. Since the occurrence of resistant individuals is difficult to detect prior to use, ADAMA Australia accepts no liability for any losses that may result from the failure of BOBCAT i-MAXX to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Consult your farm chemical supplier, consultants, local Department of Agriculture of Primary Industries, or ADAMA representative. |
| Precautions: | RE-ENTRY PERIOD: Do not allow entry into treated areas until spray has dried. |
| Protections: | <p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS THIS PRODUCT MAY KILL MANY TREES AND OTHER DESIREABLE PLANTS IF NOT CORRECTLY APPLIED. DO NOT apply or drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. 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.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or waterways with the chemical or used containers.</p> |
| Storage and Disposal: | <p>Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight.</p> <p>5L, 10L, 20L containers only: This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. DO NOT dispose of undiluted chemical 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 program site. The cap should not be replaced, but may be taken separately.</p> |

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| | <p>If not recycling, break, crush, or puncture and deliver empty packaging 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.</p> <p>Returnable containers (110L, 200L): 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 with clean water 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 ADAMA Australia Pty. Ltd.</p> <p>1000 L: Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use then the integrity of this product cannot be assured. If this occurs ADAMA Australia Pty. Ltd. should be advised immediately. This minibulk container is reusable and remains the property of ADAMA Australia Pty. Ltd. DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and return to the point of supply for refill or storage. No other liquid, solid or pesticide product should be put into it. When empty return to ADAMA Australia Pty. Ltd. for cleaning, relabelling and refilling.</p> |
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| Safety Directions: | <p>Harmful if swallowed. Will irritate the eyes. May irritate the skin. Avoid contact with eyes and skin. When opening the container and preparing product for use, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and face shield or goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.</p> |
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| First Aid Instructions: | <p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.</p> |
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| First Aid Warnings: | |
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DIRECTIONS FOR USE**Table 1. Pre-emergence application in ratoons**

| SITUATION | WEEDS | RATE PER HA | CRITICAL COMMENTS |
|---|---|--------------|---|
| Sugarcane ratoon crops (Qld, NSW and WA only) | <p>Weeds controlled: Awnless Barnyard Grass (<i>Echinochloa colona</i>), Barnyard Grass (<i>E. crus-galli</i>), Blackberry Nightshade (<i>Solanum nigrum</i>), Blue Billygoat Weed (<i>Ageratum houstonianum</i>), Calopo Vine (<i>Calapogonium mucunoides</i>) Common Sida (<i>Sida rhombifolia</i>), Giant/Black Pigweed (<i>Trianthema portulacastrum</i>), Glossy Nightshade (<i>Solanum americanum</i>), Green Amaranth (<i>Amaranthus viridis</i>), Green Summer Grass (<i>Brachiaria subquadrifera</i>), Ipomoea spp., Guinea Grass (<i>Panicum maximum</i>), Liverseed Grass (<i>Urochloa panicoides</i>), Milkweed (Mexican Fire Plant) (<i>Euphorbia heterophylla</i>), Pigweed (<i>Portulaca oleracea</i>), Sowthistle (<i>Sonchus oleraceus</i>) Summer Grass (<i>Digitaria ciliaris</i>)</p> <p>Weeds suppressed: Couch grass (<i>Paspalum notatum</i>), Nutgrass (<i>Cyperus rotundus</i>)</p> | 2.9 to 3.8 L | <p>Apply as pre-emergent application after harvest and before new cane growth appears. If applying as a band treatment, avoid throwing excessive untreated soil onto the treated band when inter-row cultivating.</p> <p>Use the higher rate of BOBCAT® i-MAXX for increased residual control of weeds or anticipated high weed pressure. Heavy trash layers may prevent the product from reaching the soil. Apply to weed-free soil prior to weed germination. Sufficient rainfall, or overhead irrigation, is required after application and prior to weed emergence to wet soil to a minimum depth of 5 cm. Emerged weeds must be controlled by prior cultivation, or application of an appropriate herbicide. Weed control can be improved under dry conditions or where incorporating moisture has been insufficient, by cultivating the treated soil above setts. Care needs to be taken to minimise exposure of untreated soil or setts.</p> <p>Prolonged wet soil and/or cool conditions can increase crop damage, especially in sandy soil. Normal growth will return when conditions become warm and drier. Pre-emergence weed control may be limited on Krasnozems or red brown Ferrosol soil types, where moisture is not maintained in the top 5 cm of soil. Refer to Soil Type in the General Instructions. Weed escapes may require follow up application of an appropriate herbicide.</p> <p>Nutgrass and Couch grass are suppressed by BOBCAT® i-MAXX for up to six weeks. Under dense infestations, the level of suppression achieved by BOBCAT® i-MAXX may not be acceptable and other strategies may be required to reduce the density of these hard to control weeds.</p> <p>Contact ADAMA for advice on variety susceptibility before using this product (refer to the CROP SAFETY section of the label).</p> <p>DO NOT apply more than 3.8 L/ha per year.</p> <p>DO NOT apply to blocks that are to be replanted soon after harvest.</p> <p>Minimum re-cropping intervals apply for all crops following BOBCAT® i-MAXX application. See "FOLLOW CROPS" section below for re-cropping guidelines and restrictions.</p> |

Table 2. Application in emerged cane as a directed spray

| SITUATION | WEEDS | RATE PER HA | CRITICAL COMMENTS |
|---|---|--|---|
| Sugarcane plant and ratoon crops (Qld, NSW and WA only) | As per weeds listed in Table 1 plus control of those weeds expected with these rates of 250 g/L paraquat products alone | 2.9 to 3.8 L plus 1.6 L of Spraytop® 250 SL Herbicide (or other registered paraquat product) | <p>Directed inter-row spray application in emerged cane: When applying BOBCAT® i-MAXX in emerged cane, always apply in a tank mix with paraquat. DO NOT apply in the planting furrow in plant cane. Only apply to plant cane as a directed inter-row spray after the final cultivation and hill formation.</p> <p>Apply as a directed inter-row spray, full width between rows or as a band treatment after final cultivation and hill formation to a weed-free surface. Use the higher rates of BOBCAT® i-MAXX for increased residual control of weeds or anticipated high weed pressure. Use as a directed spray to minimise contact with sugarcane foliage. Contact with sugarcane foliage may cause temporary crop damage observed as interveinal yellowing and reduction in crop biomass or crop height. Refer to Spraytop® 250 SL Herbicide label for further instructions on spray boom types and safety precautions. Reduce the incidence of “fines” by using the correct nozzles and operating pressures. Replace worn or old nozzles and calibrate equipment on a regular basis.</p> <p>DO NOT cultivate within 1 hour of application. DO NOT spray plants covered with heavy dew. Prolonged wet soil and/or cool conditions can increase crop damage, especially in sandy soil. Normal growth will return when conditions become warm and drier. Pre-emergence weed control may be limited on Krasnozem or red brown Ferrosol soil types, where moisture is not maintained in the top 5 cm of soil. Refer to Soil Type in the General Instructions. Contact ADAMA for advice on variety susceptibility before using this product (refer to the CROP SAFETY section of the label). DO NOT use any more than 3.8 L/ha per year. DO NOT apply to blocks that are to be replanted soon after harvest.</p> <p>Minimum re-cropping intervals apply for all crops following BOBCAT® i-MAXX application. See “FOLLOW CROPS” section below for re-cropping guidelines and restrictions.</p> |

Table 3. Spot spraying of Guinea Grass using hand held equipment or optical spot spray technologies

| SITUATION | WEEDS CONTROLLED | RATE | CRITICAL COMMENTS |
|---|------------------|-------------|--|
| Sugarcane plant and ratoon crops (Qld, NSW and WA only) | Guinea Grass | 2.1 L/100 L | <p>Spray when Guinea Grass stools are at least 15 cm high for best results. Apply as a dilute spray and wet thoroughly to the point of runoff. Avoid contact with adjacent cane as crop injury will result.</p> <p>BOBCAT® i-MAXX is residual and the effects may last for some time in the treated areas. Before use, refer to the minimum re-cropping intervals apply for all crops following BOBCAT® i-MAXX application. See “FOLLOW CROPS” section below for re-cropping guidelines and restrictions.</p> |

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

GENERAL INSTRUCTIONS

All Applications: Reduce the incidence of “fines” by using the correct nozzles and operating pressures. Replace worn or old nozzles and calibrate equipment on a regular basis.

BOBCAT® i-MAXX is a soil residual, broad spectrum, general herbicide for control of many annual and perennial grasses and broadleaf weeds. Best results occur if BOBCAT® i-MAXX is applied shortly before weed germination and growth occurs.

Well established weeds should first be eliminated by mechanical or other means. For best results soil should be well prepared as free as possible from trash and clods. Results vary with soil type (lower rates are effective on lighter soils, higher rates may be necessary for effective control on heavier soils) and environmental conditions.

Effects are slow to appear and may not become apparent until sufficient moisture (12-25 mm on moist soils, 25-50 mm on dry soils) in the form of rainfall or irrigation occurs after treatment to carry the chemical into the root zone of the germinating weeds. Best results are obtained if rainfall or irrigation occurs within 3-4 days after application.

Pre-emergence: Where possible, apply to soil two days prior to incorporation. Incorporate with adequate irrigation or rainfall to a minimum depth of 5 cm. When applying BOBCAT® i-MAXX in moist soil conditions, allow weeds to germinate prior to application and apply mixed with a recommended knockdown herbicide. Whenever emerged weeds are present BOBCAT® i-MAXX should be mixed with an appropriate knockdown herbicide.

Post-emergence: BOBCAT® i-MAXX must always be mixed with registered rates of paraquat (i.e. Spraytop® 250 SL herbicide) and applied as a carefully directed inter-row spray.

INCORPORATION

Incorporate via rainfall or irrigation within 3-4 days after application. For incorporation by irrigation, the entire treated area must be thoroughly wetted; however, care should be taken not to over-water and cause runoff.

APPLICATION

DO NOT apply by aircraft.

Other than the spot spraying of Guinea grass, all dosages of BOBCAT® i-MAXX are expressed as rates per treated area. For band treatment use proportionately less, i.e. use only half of the overall rate when treating one half of the area. Temporary chlorosis of lower leaves may occur. To minimise this injury use low directed spray application. Tolerance of cane variety should be determined before treating large areas.

BOBCAT® i-MAXX is a water miscible liquid formulation. The product is mixed with water and applied at recommended rates with ground equipment. Apply in a spray volume of 400-600 L/ha with a properly calibrated boom.

When mixing BOBCAT® i-MAXX, partially fill the spray tank with water and add the correct amount of the product for the area to be sprayed with the agitation system engaged. Top up to correct volume with water, and for best results keep the spray solution agitated whilst spraying. Spray booms must be shut off while starting, turning, slowing or stopping, as overdose may result in injury to the crop. Use sufficient water (400-600 L/ha of area actually sprayed) to provide thorough and uniform coverage. Use sufficient pressure to allow to penetrate, 250-350 kPa is the pressure range generally used. Higher pressures should be avoided to prevent spray drift on to non-target areas.

FOLLOW CROPS

Under conditions which do not favour breakdown of this product, carry-over soil residues can affect susceptible follow crops. Imazapic is primarily degraded in soil by microbial breakdown. Under conditions which do not favour breakdown of imazapic i.e. low soil moisture, acidic soil pH and/or soils low in microbial activity; carry-over soil residues can affect susceptible follow crops.

Minimum re-cropping intervals (months after application) should be observed as per the relevant re-cropping tables and guidelines below.

As environmental and agronomic factors make it impossible to eliminate all risks associated with this product, rotational crop injury is always possible.

Where BOBCAT® i-MAXX residue carryover is suspected (even after observing the minimum re-cropping intervals) and susceptible crops are to be planted, test the treated area as follows:

- Field bioassay – where rain allows, plant a small area of the susceptible crop four to six weeks before desired planting date and take note of any symptoms of injury. If any herbicide symptoms are observed, only plant a non-susceptible crop.
- Pot bioassay – where not practical to do field bioassay, plant a small number of seeds of the susceptible crop into pots containing soil from the treated field. Do this four to six weeks before desired planting date. If any herbicide symptoms are observed, only plant a non-susceptible crop.

Re-cropping intervals following application:

| MONTHS AFTER APPLICATION ^β | |
|---|-----------------|
| 24 | 36 |
| Cotton [†] , Sunflower, Mungbeans, Peanuts, Soybeans, Maize [#] , Sorghum [#] , Chick peas, Lucerne*, Barley*, Wheat*, Lupins, Pasture Legumes | Any other crops |

[†]DO NOT apply BOBCAT® i-MAXX in areas where rainfall from spraying to sowing of cotton is expected to be below 550 mm.

[#]DO NOT apply BOBCAT® i-MAXX in areas where rainfall from spraying to sowing of sorghum or maize is expected to be below 500 mm.

*DO NOT apply BOBCAT® i-MAXX in areas where rainfall from spraying to sowing of cereals or lucerne is expected to be below 200 mm.

^βWhere minimum rainfall requirements apply, at least half the minimum recommended rainfall should fall within the first half of the re-cropping interval to reduce potential risk of rotational crop injury.

CROP SAFETY

This product may, in some circumstances, lead to transient crop yellowing and temporary slowing of growth in sugarcane but plants soon recover and yield is unaffected. This effect may be more pronounced when the product is used under conditions where soil moisture is high within 2 days following application and on light/sandy soil. Contact ADAMA for advice on variety susceptibility before using this product.