

HERBICIDE

Active Constituent: 750 g/kg TRIFLOXYSULFURON SODIUM

For the control of Bindii, Burr Medic, Clover, Mullumbimby Couch, Nutgrass, Ryegrass, Winter Grass and suppression of Kikuyu in Turf as per Directions for Use

GROUP	В	HERBICIDE
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APVMA Approval No: 56687/25/0405

Pack size: 25 g (5 x 5 g)

GENERAL INSTRUCTIONS

MONUMENT is a selective herbicide for application after emergence of weeds, for control of certain weeds in established turf. MONUMENT is a water dispersible granule formulation that must be thoroughly and uniformly mixed in water and applied as a spray.

The degree of control resulting from application of MONUMENT is primarily dependent upon weed species, weed size at application, environmental conditions, amount of MONUMENT applied, and growing conditions. Weed control is greatly improved when weeds have emerged, ample soil moisture exists, and weeds are actively growing, than when the soil is dry and weeds are under stress from lack of moisture. Growth of susceptible weeds is inhibited soon after application of MONUMENT. The leaves of susceptible plants normally turn yellow, red or purple after several days, followed by necrosis and death of the growing point. Complete plant death generally occurs 2 to 4 weeks after application, depending on the weed species, growing conditions etc.

Apply to actively growing weeds during early stages of development for best results. For optimum performance avoid mowing for 1 to 2 days prior to and following application.

Resistant Weeds Warning

MONUMENT Herbicide is a member of the sulfonylurea group of herbicides and has the ALS Inhibitor mode of action. For weed resistance management this product is a Group B herbicide. Some naturally occuring weed biotypes resistant to MONUMENT and other sulfonylurea 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 MONUMENT or other Group B 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 MONUMENT to control the 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.

Mode of Action

MONUMENT controls weeds by inhibiting a biochemical process that produces certain essential amino acids necessary for plant growth. The inhibited enzyme system is acetolactate synthase (ALS).

Mixing

MONUMENT mixes readily with water - no pre-mixing is required.

If pH of water carrier is less than 5.5, use a buffer solution to raise pH to near 7.0. DO NOT mix MONUMENT with acid forming compounds in the spray vat.

This product must be mixed with water and applied by suitable spray equipment.

1. Clean the spray tank before using. If it is contaminated with other materials, mixing problems and/or clogging may occur, or injury to the turf may result.

- 2. Fill vat no more than 25% full with clean water before adding MONUMENT. Begin agitating vat contents vigorously and continue agitation during entire mixing and spraying operations.
- 3. Water soluble sachets should be added to the tank first after water. Allow sachet to completely dissolve and contents to fully disperse into the mix water.
- Pour required amount of MONUMENT steadily into vat. Allow vigorous bypass agitation to completely disperse product. DO NOT dump product into vat all at once.
- 5. After adding required quantity of MONUMENT and obtaining complete dispersion, continue to fill vat to desired level for spraying.
- 6. Add required quantity of non-ionic surfactant if using and continue agitation.
- 7. Thorough agitation (preferably mechanical) of the spray liquid is essential during the addition of the product and during the entire spraying operation. Recirculate if left to stand.

NB Spray solution should NOT be left standing in the vat overnight.

Application

Ground application: Spray nozzles should be uniformly spaced and of the same size, and should provide accurate and uniform application. Use spray nozzles that produce a medium spray quality. To ensure accuracy, calibrate sprayer at the beginning of the season before use and recalibrate frequently. Apply at a volume of 400 to 800 L of water per hectare. Higher volumes should be used for severe weed infestations to ensure adequate spray coverage. It is recommended that a non-ionic surfactant be added to the spray solution at 0.25 to 0.5% v/v ratio. Good weed coverage with the spray mixture is essential for optimum weed control. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid overlapping of spray runs. Boom height for broadcast application should not exceed 60 cm above the leaf blades of the turf. Avoid application under conditions when uniform coverage cannot be obtained or when spray drift may occur. DO NOT apply aerially or through any type of irrigation system or equipment.

Rainfastness

MONUMENT is rainfast within 3 hours of application.

Instructions to Avoid Spray Drift

DO NOT allow spray to drift onto adjacent turf sites or ornamental plants as even small amounts may injure sensitive plants. When drift may be a problem, take steps to reduce spray drift including:

DO NOT spray if wind speed is greater than 10 km/hr or if winds are gusting.

Use extreme caution when conditions are favourable for drift, ie high temperatures and low relative humidity, especially when sensitive plants are located nearby. All plants not listed as turf species on this label should be considered as sensitive plants.

If sensitive plants are downwind, extreme caution must be used under all conditions. Drift from applications of this herbicide is likely to result in damage to sensitive plants



adjacent to the treatment site. This damage can occur at levels below the concentrations that can be detected with chemical analysis.

DO NOT apply when a temperature inversion exists. If an inversion condition is suspected, consult with local weather services before making an application.

Use nozzles that provide a uniform droplet size and produce medium to coarse droplets (250 to 400 microns VMD) that are less likely to result in spray drift.

Use flat fan nozzles.

If conditions favour drift, recalibrate sprayer by reducing spray pressures and increasing spray volumes to produce larger droplets.

Apply as close to surface of target turf as practical to obtain a good spray pattern for adequate coverage according to the manufacturer's recommendations. Ground applications are limited to a nozzle height of 60 cm above the ground. If this is not possible or desirable, and the nozzle height is greater than 60 cm, then DO NOT apply within 10 metres downwind of bent grass greens.

DO NOT apply unless there is a 30 metre downwind buffer distance between the treated areas and native vegetation.

DO NOT apply unless there is a 10 metre downwind buffer distance between the area being sprayed and natural waterbodies.

Sprayer Cleanup

Thoroughly clean spray equipment using the following procedure when you have finished spraying highly active materials such as sulfonylurea products. 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. As a first step, flush tank, hoses, boom and nozzles with clean water
- 2. Prepare a cleaning solution of 300 mL of household ammonia per 100 L of water. Ensure ammonia used is fresh as it can degrade significantly over time resulting in a reduction in cleaning ability.
- 3. 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.
- 4. 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 for extended periods to ensure adequate decontamination of the tank.
- 5. Flush hoses, spray lines and nozzles for at least 1 minute with the cleaning solution.
- 6. Dispose of rinsate from steps 1 to 5 in an appropriate manner.
- 7. Repeat steps 2 to 5.
- 8. Remove nozzles, screens and strainers and clean separately in the cleaning solution after completing the above procedures. Be careful with filters, as they are a main source of contamination.
- 9. 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 sulfonylurea herbicide residues. In some boom sprayers this may not be physically possible and hence it may be advisable to use a different boomsprayer that has not been used to spray sulfonylurea herbicides, when spraying sensitive crops or turf species.

Compatibility

As formulations of other manufacturers' products are beyond the control of Syngenta Crop Protection, and water quality varies with location, all mixtures should be tested prior to mixing commercial quantities.

Replanting interval

DO NOT replant any crop or ornamentals to treated areas other than turfgrasses listed in Directions for Use for a period of 12 months after application.

PRECAUTION

Re-entry Period: DO NOT allow entry into treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing), chemical resistant gloves and footwear. Clothing must be laundered after each day's use.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

This product is very highly toxic to non-target plants including aquatic plants. DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping lands, pastures and other non-target plants or natural and impounded lakes, dams or other waterways. Avoid applications to areas where product may accumulate under the drip line of trees or where product may come into contact with roots of desirable plants. See Instructions to Avoid Spray Drift section above.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT apply if heavy rain is forecast.

STORAGE AND DISPOSAL

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

Rinse containers before disposal. Add rinsings to 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. Wash hands after use.

- When preparing spray wear:
- cotton overalls buttoned to the neck and wrist (or equivalent clothing), 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

Restraints: DO NOT apply by air or through any type of irrigation equipment.

DO NOT apply when the turf or weeds are not actively growing.

DO NOT apply to turf under stress.

DO NOT apply to golf course putting greens.

DO NOT apply to Ryegrass, Fescue, Bentgrass, Kikuyu, Buffalo, *Paspalum* spp, Centipede Grass or any other turf species not listed in the table below (unless listed under weeds controlled). DO NOT apply to newly seeded, sodded or sprigged turf. Delay application until turf is at 100% cover and root system is developed beyond a 5 cm depth.

Situation	Weeds Controlled	Rate	Critical Comments
Established turf as named: Common Couch (Cynodon dactylon), Durban Grass (Dactyloctenium australe), Hybrid Couch (Cynodon dactylon x Cynodon transvaalensis), Zoysia (Zoysia japonica), Old Blue Couch (Digitaria didactyla)	Burr Medic (Medicargo polymorpha)	15 g/ha	For best results apply with a minimum water volume of 400 to 800 L/ha.
	Mullumbimby Couch (Cyperus brevifolius), Nutgrass (Cyperus rotundus)	20 g/ha	The addition of a quality non-ionic surfactant at a rate of 0.25–0.5% v/v is recommended.
	Bindii (Soliva sessilis), Ryegrass (Lolium perenne) Wintergrass (Poa annua)	30 g/ha	A repeat application may be needed in 4 to 6 weeks. Allow at least 6 weeks between last application and overseeding with cool season grasses for winter cover. Transient discolouration may occur when applied to Zoysia and Qld Blue Couch. For Kikuyu suppression, make 2 applications 21 to 28 days apart. Best results are gained from autumn applications.
	Clover (Trifolium repens)	40 g/ha	
	Kikuyu (Pennisetum clandestinum) SUPPRESSION ONLY		

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

WITHHOLDING PERIOD DO NOT GRAZE TREATED TURF/LAWN OR FEED TURF/LAWN CLIPPINGS FROM ANY TREATED AREA TO POULTRY OR LIVESTOCK