

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



Casper

Turf Herbicide

syngenta®

ACTIVE CONSTITUENTS: 500 g/kg DICAMBA
50 g/kg PROSULFURON

GROUP **B I** HERBICIDE

For post-emergence control of certain broadleaf weeds
in established turf as per the Directions for Use

Syngenta Australia Pty Ltd

Level 1, 2-4 Lyonpark Road, Macquarie Park NSW 2113

In a transport emergency dial 000, Police or Fire Brigade

For specialist advice in an emergency only, call 1800 033 111 (24 hours)

APVMA Approval No: 63890/59411

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DIRECTIONS FOR USE

Restraints

- DO NOT apply with aircraft or through any type of irrigation equipment
- DO NOT apply using spraying equipment carried on the back of the user
- DO NOT apply with a nozzle height greater than 50 cm above the ground
- DO NOT apply when the turf or weeds are not actively growing
- DO NOT apply to golf course putting greens or bowling greens
- DO NOT apply to Buffalo Grass
- DO NOT apply to turf which is not well established
- DO NOT apply if heavy rain has been forecast within 48 hours
- DO NOT apply to waterlogged soil
- DO NOT irrigate to the point of runoff within 3 days of application

Spray Drift Restraints

- DO NOT apply with spray droplets smaller than a **COARSE** spray droplet size category according to "APVMA Compliance Instructions for Mandatory COARSE or Larger Droplet Size Categories" located under this title in the GENERAL INSTRUCTIONS section of this label
- DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour as measured at the application site
- DO NOT apply during surface temperature inversion conditions at the application site
- Users of this product **MUST make an accurate written record** of the details of each spray application within 24 hours following application and **KEEP** this record for a minimum of 2 years. The spray application details that must be recorded are: **1)** date with start and finish times of application, **2)** location address and paddock/s sprayed, **3)** full name of this product, **4)** amount of product used per hectare and number of hectares applied to, **5)** crop/situation and weed/pest, **6)** wind speed and direction during application, **7)** air temperature and relative humidity during application, **8)** nozzle brand, type, spray angle nozzle capacity and spray system pressure measured during application, **9)** name and address of person applying this product. (Additional record details may be required by the State or Territory by the State or Territory where this product is used.)

Mandatory No-Spray Zones

- DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers within 25 metres downwind from the application area
- DO NOT apply if non-target vegetation is within 10 metres downwind from the application area

Situation	Weeds	Rate	Critical Comments
Established fine and amenity turf	Blackberry Nightshade (<i>Solanum nigrum</i>), Catsear (<i>Hypochoeris radicata</i>), Chickweed (<i>Stellaria media</i>), Creeping Oxalis (<i>Oxalis corniculata</i>), Curled Dock (<i>Rumex crispus</i>), Khaki Weed (<i>Alternanthera pungens</i>), Milk Thistle (<i>Sonchus oleraceus</i>)	600 to 800 g/ha	Apply to weeds after emergence from autumn to early spring. Use the higher rates during cooler months of the year or if weed pressure is high. Complete control may take 4 to 6 weeks depending on weed growth stage at application and also soil and air temperature. Weed death will generally take longer when an application is made during winter (May to August). A repeat application may be needed in 4 to 6 weeks if lower rates are used in high weed pressure situations or during extended germination periods due to environmental conditions. Add a non-ionic surfactant to the spray solution at a ratio of 0.25 to 0.5% v/v. Refer to Application section for detailed information.
	Bindii (<i>Soliva sessilis</i>), Burr Medic (<i>Medicago polymorpha</i>), Cotula (<i>Cotula australis</i>), Dandelion (<i>Taraxacum officinale</i>), Fleabane (<i>Conyza bonariensis</i>), Lambs Tongue/ Plantain (<i>Plantago lanceolata</i>), Subterranean Clover (<i>Trifolium subterraneum</i>), Wireweed (<i>Polygonum aviculare</i>)	800 g to 1 kg/ha	
	Pennywort (<i>Hydrocotyle bonariensis</i>), White Clover (<i>Trifolium repens</i>)	1 to 1.2 kg/ha	

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

GENERAL INSTRUCTIONS

Mixing

CASPER mixes readily with water, no pre-mixing is required. 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 tank no more than 25% full with clean water before adding CASPER. Begin agitating tank contents vigorously and continue agitation during entire mixing and spraying operation.
3. Pour required amount of CASPER steadily into tank. Allow vigorous bypass agitation to completely disperse product.
4. After adding required quantity of CASPER and obtaining complete dispersion, continue to fill tank to desired level for spraying.
5. Add required quantity of non-ionic surfactant if using and continue agitation.
6. 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.

Note: Spray solution should NOT be left standing in the tank overnight.

Compatibility

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

Application

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

DO NOT apply using spraying equipment carried on the back of the user.

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 no smaller than a **COARSE** 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 water/ha. Higher volumes should be used for severe weed infestations and higher cut turf (>15 mm) to ensure adequate spray coverage. It is recommended that a non-ionic surfactant be added to the spray solution at a 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. Ensure that boom height for broadcast application does not exceed 50 cm above the leaf blades of the turf. Avoid application under conditions when uniform coverage cannot be obtained or when spray drift may occur.

APVMA Compliance Instructions for Mandatory COARSE or Larger Droplet Size Categories

Important Information

These instructions inform users of this chemical product how to lawfully comply with the requirement of a COARSE or larger spray droplet size category for spray application.

Spray droplet size categories are defined in the ASAE S572 Standard (newer name may also be shown as ASABE) or the BCPC guideline. Nozzle manufacturers may refer to one or both to identify droplet size categories, but for a nozzle to comply with this requirement, the manufacturer must refer to at least one.

In the following instructions, Section 1 is for ground application and Sections 2 and 3 are for aerial application. **Complying with the label requirement to use a specific droplet size category means using the correct nozzle that will deliver that droplet size category under the spray operation conditions being used. The APVMA has approved only the following specific methods for choosing the correct nozzle. Use one of the methods specified in these instructions to select a correct nozzle to deliver a COARSE or larger droplet size category.**

SECTION 1 Instructions for Ground Application – for COARSE droplet size or larger categories

Mandatory Instructions for Ground Applications

USE ONLY nozzles that the nozzles' manufacturer has rated to deliver a COARSE, a VERY COARSE or an EXTREMELY COARSE droplet size category as referenced to ASAE S572 or BCPC. Choose a nozzle specified to provide the droplet size category required in the label Spray Drift Restraints. DO NOT use a higher spray system pressure than the maximum the manufacturer specifies for the selected nozzle to deliver the droplet size category required in the label Spray Drift Restraint.

Sections 2 and 3 are not applicable to this label.

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.

DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour as measured at the application site

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 surface temperature inversion exists. If an inversion condition is suspected, consult with local weather services before making an application.

DO NOT apply with smaller than **COARSE** spray droplets according to ASAE S572 definition for standard 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 50 cm above the ground.

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.

1. **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/100 L 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.

Herbicide Resistance Warning

GROUP B | I HERBICIDE

CASPER Turf herbicide is a member of the sulfonylureas and benzoic acid groups of herbicides and has the ALS inhibitor and disruptor of plant cell growth modes of action. For weed resistance management CASPER is a Group B and I herbicide. Some naturally occurring weed biotypes resistant to CASPER and other Group B and I 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 CASPER or other Group B or I herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Syngenta Australia Pty Ltd accepts no liability for any losses that may result from the failure of CASPER 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.

Integrated Pest Management

The possible effects of CASPER on integrated pest management (IPM) strategies in the turf industry have not been studied at the proposed rates. However, based on available information, it cannot be ruled out that CASPER may have an adverse effect on non-target beneficial turfgrass invertebrates where such IPM is practised.

PRECAUTION

General Safety Precaution

DO NOT apply using spraying equipment carried on the back of the user.

Re-entry Period

DO NOT allow the general public to enter treated areas until the spray has dried.

DO NOT allow entry into treated areas until the spray has dried for low exposure activities such as mowing, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. Clothing must be laundered after each day's use.

DO NOT ALLOW entry into treated areas for 14 days for high exposure activities such as hand weeding or transplanting, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

This product is 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.

PROTECTION OF LIVESTOCK, WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life. 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. 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 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 site 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.

SAFETY DIRECTIONS

May irritate the eyes. Avoid contact with eyes. When using the prepared spray by low pressure hand wand, wear:

- cotton overalls, over normal clothing, buttoned to the neck and wrist
- a washable hat
- elbow-length chemical resistant gloves
- half facepiece respirator

If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, contaminated clothing and respirator, if rubber, wash with detergent and warm water.

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.greencast.com.au or www.syngenta.com.au

DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta’s liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.

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Batch No	
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