

CAUTION

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



Duke 100 WG

HERBICIDE

ACTIVE CONSTITUENT:

100 g/kg IODOSULFURON-METHYL-SODIUM

GROUP B HERBICIDE

For the post-emergent control of certain broadleaf weeds and grasses in turf and for the suppression of Winter grass and Bahia grass as per the Directions for Use.

IMPORTANT: READ THIS LEAFLET BEFORE OPENING OR USING



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Net Contents
100 g

DIRECTIONS FOR USE:

RESTRAINTS:

DO NOT apply by air or through any type of irrigation equipment.
DO NOT apply to turf which is under stress or which is not yet established.
DO NOT use if rain is expected within 4 hours. DO NOT use on golf or bowling greens.
DO NOT make more than one application of a group B herbicide in a season except for Bahia grass -refer to Directions for Use table for Bahia grass.

SPRAY DRIFT RESTRAINTS

DO NOT allow spray to drift onto adjacent areas which contain desirable plants.
DO NOT apply with spray droplets smaller than a **MEDIUM** spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline.
DO NOT apply when wind speed is less than 3 or more than 20 km 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 where this product is used.)

MANDATORY NO SPRAY ZONE

DO NOT apply if there are sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat within 40 metres downwind from the application area.

SITUATION	WEED	RATE	CRITICAL COMMENTS
Turf Only apply to kikuyu, buffalo grass or couch grass (common and hybrid couchgrass NOT Queensland Blue Couch)	Weeds suppressed		Apply to actively growing weeds and not to weeds under stress. Always apply with a non-ionic surfactant or Hasten® at the recommended rate on the surfactant product label. Use a water rate of 200-500 L/ha Avoid exceeding application rates through overlapping sprayed areas. Safety screening may not have been conducted on all new buffalo grass varieties and it is therefore recommended that small areas be tested for turf safety before large-scale application occurs. For suppressed weed species, better efficacy can be expected against younger weed plants. Less than 50% control can be expected where more mature plants are established.
	Winter grass (<i>Poa annua</i>)	150 g/ha	
	Weeds controlled		
	Ryegrass (<i>Lolium perenne</i>)	150 g/ha	
	Bindii (<i>Saliva sessilis</i>), Black thistle (<i>Cirsium vulgare</i>), Cat's ear (<i>Hypochoeris radicata</i>), Cotula (<i>Cotula australis</i>), Cudweed (<i>Gnaphalium</i> sp.), Guildford Grass (Onion Grass) (<i>Romulea rosea</i>), Medic (<i>Medicago</i> spp.), Mouse ear chickweed (<i>Cerastium vulgatum</i>), Oxalis (<i>Oxalis corniculata</i>) White Clover (<i>Trifolium repens</i>)	100 g/ha	Apply during summer when turf is actively growing and Bahia grass produces seed heads. Always apply with a non-ionic surfactant or Hasten® at the recommended rate on the surfactant product label. Apply as soon as seed heads start to form or when it becomes a regular mowing intervention issue. Apply 2-3 times at 4-week intervals after mowing. DO NOT apply more than two consecutive applications per season.
	False onion weed/ fragrant false garlic/ onion weed (<i>Nothoscordum gracile</i> , <i>fragrans</i> or <i>borbonicum</i>)	25 g/ha	
	Bahia Grass (<i>Paspalum notatum</i>) suppression and seed head reduction	50 g/ha	

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

WITHHOLDING PERIODS:

DO NOT graze treated turf or feed turf clippings from any treated area to poultry or livestock.
DO NOT use clippings from treated areas for mulch around vegetables or fruit trees.

GENERAL INSTRUCTIONS

ProForce DUKE 100 WG Herbicide is a selective sulfonylurea herbicide. It is predominantly a foliar herbicide with less activity via the soil. DUKE 100 WG will not reliably control weeds that emerge after spraying. Results are best under good growing conditions and application to weeds or turf under stress should be avoided.

MIXING

Ensure that the spray tank is completely clean prior to mixing. Half fill the spray tank with water, then with agitators in motion, add the correct amount of DUKE 100 WG directly into the spray tank. Then add wetting agent or crop oil as recommended. Complete filling the tank with agitators in motion. Agitation must continue before and during spraying.

If pH of water carrier is less than 5.5 use a buffer solution to raise pH to meet 7.0. DO NOT mix DUKE 100 WG with acid forming compounds in the spray vat. DO NOT leave spray mix standing in the vat overnight.

APPLICATION

Ensure spraying equipment is properly calibrated before use.

Ensure that complete and even spray coverage of all weeds is achieved. DO NOT overlap sprayed areas. Apply with the boom no higher than 50 cm above the turf with flat fan nozzles and a medium droplet size.

Turf Safety

Application to very dry sandy soils followed by soaking rainfall may cause turf damage. Turf damage may also be increased in highly alkaline soils (soil pH >8.5 as determined by soil in water suspension).

Avoid application on turf which is not yet established or which is under stress from environmental conditions.

Allow at least six weeks between the last application and overseeding with cool season grasses for winter cover.

Sprayer Clean Up

The sprayer must be thoroughly decontaminated before being used again to spray susceptible plants or turf. Ensure that the following operation is carried out in an area that is clear of waterways, desirable vegetation and tree roots, and preferably in an area where drainings can be contained.

1. Drain sprayer completely and wash out tank, boom and hoses with clean water.
2. Drain again.
3. Fill the tank with clean water and add 300 mL of chlorine bleach (containing 4% chlorine) per 100 L of water with agitation running.
4. Flush some bleach solution through booms and hoses and allow remainder to agitate in tank for 10 minutes.
5. Remove nozzles and filters and leave to soak in a bleach solution of 500 ml per 10 L of water while tank cleaning is in progress.
6. Briefly run the pump at periodic intervals to refresh chlorine solution in spray lines.
7. Drain tank and repeat the procedure of flushing with bleach solution.

Flush the tank, boom and hoses with clean water.

RESISTANT WEEDS WARNING

ProForce DUKE 100 WG Herbicide is a member of the sulfonylurea group of herbicides and has the inhibitor of ALS mode of action. For weed resistance management DUKE 100 WG is a Group B herbicide. Some naturally-occurring weed biotypes resistant to DUKE 100 WG, and other Group B herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by DUKE 100 WG or other Group B herbicides.

DO NOT rely exclusively on DUKE 100 WG for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control. CropLife Australia resistance management strategies are available from your local agricultural chemical supplier. Refer to these strategies for details of how to manage the build-up of resistant weeds in your turf.

Since occurrence of resistant weeds is difficult to detect prior to use, Indigo Specialty Products Pty Ltd accepts no liability for any losses that may result from the failure of DUKE 100 WG to control resistant weeds.

PRECAUTION

Mowing

Avoid mowing during the 3 to 4 days preceding or following treatment.

Re-entry period: DO NOT allow entry into treated areas until the spray has dried.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Very toxic to aquatic plants and certain algae.

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 replant any crop or ornamental to treated areas other than the turf grass listed in the directions for use for a period of 12 months after application.

GROUP	B	HERBICIDE
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PROTECTION OF LIVESTOCK

DO NOT graze treated turf or feed turf clippings from any treated area to poultry or livestock.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Keep people and pets off treated areas until spray deposits have dried. 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 cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple-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 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.

SAFETY DIRECTIONS

Will irritate the eyes. Avoid contact with eyes. When opening the container and preparing spray wear 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 and goggles.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

SDS

Additional information is listed in the safety data sheet (SDS). A safety data sheet for ProForce DUKE 100 WG Herbicide is available from Indigo Speciality Products Pty Ltd on request.

CONDITIONS OF SALE:

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. No warranty (other than non-excludable statutory warranties) of merchantability or fitness for a particular purpose, express or implied, extends to the use of product contrary to label instructions, or under off-label permits not endorsed by Indigo Speciality Products Pty Ltd or under abnormal conditions. Indigo Speciality Products Pty Ltd accepts no liability for any loss or damage arising from incorrect storage, handling or use.

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APVMA Approval No.: 88829/126513