



# Duke 100WG

## Herbicide

*Dependable Grass and Broadleaf Weed Control*



### Product Overview

ProForce Duke 100WG Herbicide contains 100g/kg of the active ingredient Iodosulfuron-methyl sodium and is registered for the control of the following weeds;

**Broadleaf Weeds:** Bindii, Black Thistle, Catsear, Cotula, Cudweed, Guildford Grass, Medic, Mouse Ear Chickweed, Oxalis, White Clover and False Onion Weeds.

**Grass Weeds:** Ryegrass, Wintergrass (Suppression), Bahia grass (Suppression and seedhead reduction).

ProForce Duke 100WG is available in a Wettable Granular formulation in both a 200g and 500g pack size.

ProForce Duke 100WG is formulated in Australia, from imported materials.

### Key Features

- > Provides control of hard to kill weeds.
- > High level of safety on Couch, Kikuyu and most Buffalo varieties.
- > Broad spectrum of weed control – Single pass solution.
- > Low application rates and low active ingredient output.
- > Provides suppression of difficult to control grass weeds in Wintergrass and Bahiagrass.
- > Low odour, non-phenoxy mix. Good option from a resistance management, rotational perspective for broadleaf weeds.
- > Multiple pack sizes (200g and 500g) to fit most application situations.
- > Manufactured in Australia.

### Mode of Action

#### GROUP B HERBICIDE

Iodosulfuron methyl, the active ingredient in Duke 100WG, belongs to the Sulfonylurea class of chemistry and is a group B herbicide. As with other herbicides of the sulfonylurea herbicides, the primary biochemical target site of iodosulfuron-methyl-sodium is the enzyme acetolactate synthase (ALS). ALS is a key enzyme in the production of branched chain amino acids, which are critical for protein synthesis and normal plant growth. The visible symptoms of herbicidal action are arrested growth within the first few days after application and the appearance of chlorotic patches, followed by slow shoot necrosis. Susceptible plants stop growth almost immediately after post-emergence application. Plants will be completely killed 4 to 6 weeks after application under good growing conditions.



**Duke 100WG Herbicide – Use Rates & Label Recommendations**

SITUATION	WEEDS CONTROLLED	RATE
Turf Only apply to kikuyu, buffalo grass or couchgrass (common and hybrid couchgrass NOT Queensland Blue Couch)	Wintergrass ( <i>Poa annua</i> – Suppression)	150g/ha
	Ryegrass ( <i>Lolium perenne</i> )	150g/ha
	Bindii ( <i>Soliva sessilis</i> ), Black Thistle ( <i>Cirsium vulgare</i> ), Cat's Ear ( <i>Hypochoeris radicata</i> ), Cotula ( <i>Cotula australis</i> ), Cudweed ( <i>Gnaphalium</i> spp.), 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> )	100g/ha
	False onion weed/ fragrant false garlic/ onion weed ( <i>Nothoscordum gracile, fragrans</i> or <i>borbonicum</i> )	25g/ha
	Bahia Grass ( <i>Paspalum notatum</i> ) suppression and seed head reduction	50g/ha

**Maximising performance**

- > For optimal results, apply in a water volume rate of 200-500L/ha.
- > Duke 100WG can be transferred or 'tracked' by equipment or foot movement. To minimise this risk, irrigate treated areas after application, but allow at least 4 hours for chemical uptake.
- > Ensure spray tanks are cleaned thoroughly, according to label directions, after use.
- > To further optimize results with Duke 100WG, always apply with a non-ionic surfactant or Hasten adjuvant at the recommended rate on the surfactant product label. Also ensure application is made to actively growing weeds and not to weeds in stress, as movement of the herbicide through the weed maybe limited and subsequent weed control may be impacted upon.
- > For the best suppression of Wintergrass, it is best to target younger weed plants. Less than 50 % control can be expected where more mature plants are established.
- > For good Bahiagrass suppression, apply during summer when turf is actively growing. 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 for best performance.
- > Avoid mowing during the 3 to 4 days preceding or following treatment.
- > Avoid entry into treated areas until the spray has dried.
- > Don't graze treated turf or feed turf clippings from any treated area to poultry or livestock.
- > 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.
- > 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.
- > 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 100WG 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 100WG with acid forming compounds in the spray vat. Don't leave spray mix standing in the vat overnight.
- > Don't use clippings from treated areas for mulch around vegetables or fruit trees.