

Weed control made easy

BARRICADE -
long lasting control
that is exempt from
poison scheduling



 **Barricade**[®]
Herbicide

syngenta[®]

BARRICADE Herbicide is a GROUP D pre-emergent herbicide that has a great fit in nurseries and landscape settings for controlling weeds in potted plants and garden beds. Attention needs to be paid to the application of BARRICADE in order to optimise the weed control in nursery potted plants. The diversity of plant types, canopy shapes, pot sizes and soil types all need to be considered along with the limitations of application equipment.

Plant foliage

One of the greatest physical barriers is the plant foliage itself – you need to either go around it or through it, or both, to get adequate soil coverage. The application method you use may have limitations depending on whether the pots are blocked or spaced and the size of the plant relative to the pot size. Post-application wash-in also needs to be considered depending on the barrier the foliar canopy presents.

Multi-nozzle boom – ‘over the top’

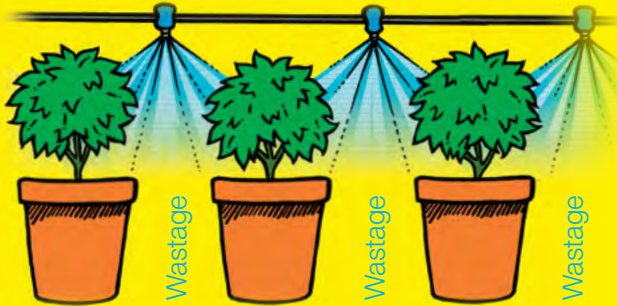
Best for smaller plants,
tightly blocked

Single nozzle/wand – ‘directed spray’

Best for bigger plants,
wider spacing or difficult access

Foliar canopy similar size to pot diameter, loosely spaced plants

Poor coverage of soil due to foliar shielding.



Direct spray with single nozzle is a better option. Targeted delivery is achieved and a very light post-application irrigation is required.

Foliar canopy smaller in size to pot diameter, plants closely spaced



Less wastage but there is still potentially a physical barrier from foliage. Attention to post-application irrigation is critical.



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As a GROUP D herbicide, BARRICADE works by inhibiting the root tips of germinating weeds. A weed may germinate but quickly has its root development impeded and eventually completely halted. Weed seeds will usually germinate right at the top of the soil in the pot and that is where BARRICADE needs to be placed. It naturally likes to stay very high in the soil, and this keeps it away from the roots of the plant we are trying to grow.

Root development

It is important that the plants, especially when they have smaller canopies have sufficiently developed root systems when using BARRICADE. An assessment of this is vitally important and should be conducted before product use. Applying BARRICADE to young plugs, cuttings or divisions whose roots are young, poorly developed or very shallow can compromise their safety. It is important that BARRICADE is **not applied** to plants that have under developed root systems where a large percentage of the total available root mass sits within the BARRICADE band (see illustrations overleaf).

Root system – size and development



Transplanted struck cutting

Early establishment

Root system filling the pot – more developed

Where
BARRICADE
sits in the soil

- ✗ Not recommended
- ! Care should be taken
- ✓ Safe

NOTE: The BARRICADE label states plant development must be assessed when considering use and recommends a period of growth and establishment occurs before first application.

“DO NOT apply to recently re-potted or newly potted cuttings, divisions or plants. Allow a period of establishment within which a substantial root system can be developed.”

There are some potting media that are simply not suitable for BARRICADE use as the pore sizes are too large and the ability to form a weed control barrier is just too limited. Examples are pure bark chips and extremely coarse media used for epiphytes, orchids and sometimes other tropical species such as Bromeliads. For these species, perfect drainage is essential and the movement of moisture away from root systems is imperative so *BARRICADE use will not be an option.*



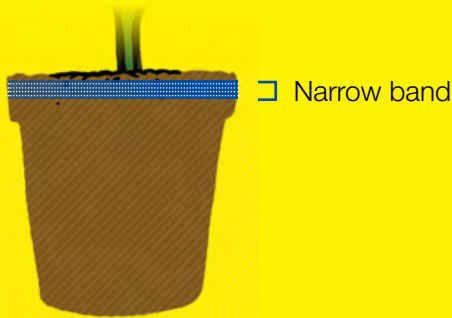
Potting media

The importance of root size and position as it relates to overall plant age and development needs to be considered when applying BARRICADE. In addition, the influence that the media type will play on where BARRICADE positions and performs also needs to be overlaid.

The active ingredient in BARRICADE (prodiamine) has an inherent desire to bind to soil and organic matter. This is a very good thing as it allows the product to stay where it has been placed during the application process and not leach out or move unpredictably. Even though these are very strong characteristics of BARRICADE, as we move between potting media there will be subtle differences in the final locations achieved post-application.

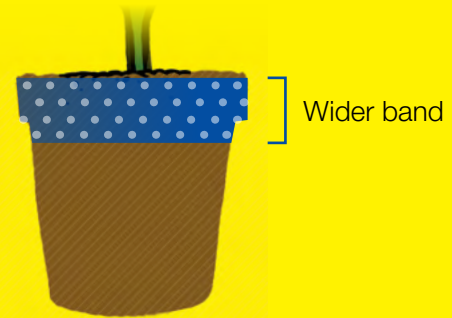
Heavier soils with higher organic content

In potting media that are heavier or have a high organic component throughout, BARRICADE will stay in a thinner more defined band and will position higher.



Sandier soils or media containing more inorganic components

In media that have a greater amount of loose inorganic components and sands, ie a lesser amount of potential binding components, the BARRICADE band will likely be wider.



BARRICADE positions near the soil surface and in different media displays subtle differences. How BARRICADE is applied also needs to be considered and here we identify some tips for application and post-application irrigation so as to avoid unnecessary troubles.

Remember, DO NOT apply to bulbs or plants where roots are located close to the surface.

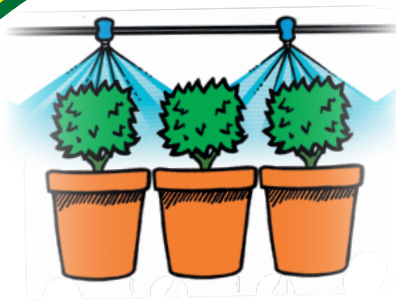
Application and post-application irrigation (product placement)

- 1.** Use appropriate nozzles such as air induction 08 Nozzles. These nozzles will deliver droplets that are in the coarse or extra coarse spectrum minimising drift and maximising product hitting its target. These big droplets also help any liquid landing on foliage to run off and start making its way to the soil.
- 2.** Light post-application irrigation ensures product is washed off the foliage and moved into the top couple of centimetres of the media providing the opportunity to bind and establish the weed control band.

Application Tips

When the right combination of application and post-application wash-in is used, a solid weed control band is produced and product performance is more likely.

If, however, you were to get excessive with the wash-in (too high a volume), or high rainfall occurred in the 24-48 hours after application, there is a risk that the active ingredient may not be sufficiently bound and might be forced deeper into the pot where root damage is possible.



Denser foliage, more wash-in required

Obstruction to spray delivery, post-application wash-in is important.



Good application and light post-application irrigation. BARRICADE positions near the soil surface.



Poor application and excessive post-application irrigation or rainfall. BARRICADE moves lower into the pot.



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Mixing Rates

Spray Unit Capacity	BARRICADE Rate	Area Covered
5 L	40 - 80 mL	100 m ²
15 L	120 - 240 mL	300 m ²
25 L	200 - 400 mL	500 m ²

BARRICADE rate used will depend on longevity required and anticipated weed pressure.

Be sure to apply a minimum of 3 mm overhead irrigation immediately after spray application to wash BARRICADE into the potting media and set the weed barrier.

TIP: Prior use of catch cans, will help accurately determine irrigation time required to achieve 3 mm over the treatment area.

BARRICADE Herbicide is now registered for pre-emergent control of weeds in garden beds and nursery pots.

Situation	Weeds	Rate
Garden beds (under mulch) and potted plants in nurseries, public open spaces and residential or commercial gardens	Nursery weeds such as: <i>African Lovegrass (Eragrostis curvula)</i> , <i>Barnyard Grass (Echinochloa crus-galli)</i> , <i>Chickweed (Ceratium glomeratum)</i> , <i>Crab Grass (Digitaria sanguinalis)</i> , <i>Crowsfoot Grass (Eleusine indica)</i> , <i>Creeping Oxalis (Oxalis corniculata)</i> , <i>Cudweed (Gnaphalium spp)</i> , <i>Paspalum (Paspalum dilatatum)</i> , <i>Prairie Grass (Bromus wildenowie)</i> , <i>Rat's Tail Fescue (Vulpia myuros)</i> , <i>Ryegrass (Lolium perenne)</i> , <i>Sow Thistle (Sonchus spp)</i> , <i>Summer Grass (Digitaria ciliaris)</i> , <i>Willowherb (Epilobium ciliatum)</i> , <i>Winter Grass (Poa annua)</i>	4 to 8 L/ha

Refer to the registered label for full details and instructions for use.

What BARRICADE offers you:

- A liquid formulation for ease of use and accurate dosing
- A herbicide exempt from poison scheduling
- Long lasting control – up to 4 months in potted plants and 6 months in garden beds under mulch
- A great option for use across a range of plants including species normally sensitive to spreadable granule formulations

For more information visit
www.greencast.com.au

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