



Nirvana[®]

A non-selective herbicide for the control of grasses, broad-leaved weeds and clover.

<u>Active Ingredient:</u>	200g/L glufosinate-ammonium
<u>Chemical Group:</u>	Ammonium phosphate
<u>Formulation:</u>	Soluble concentrate
<u>Pack Size:</u>	5 and 20 Litre
<u>Compatibility:</u>	May be tankmixed with most commonly used residual herbicides.

Nirvana is absorbed into the foliage and stems of actively growing plants. It is inactive in soil and does not translocate as an active herbicide, so thorough coverage of target weeds is critical for best results. Visual effects of treatment will become evident more rapidly under ideal growing conditions, generally within 3-10 days. Rainfall within 2 hours of application may wash Nirvana off the foliage, and within 6 hours will reduce the effectiveness to the degree that re-treatment will be necessary. NB: Do not spray in temperatures below 10°C. Avoid contact on green parts (including immature bark) of desirable plants, as damage may occur. Do not mow or cultivate after treatment until weeds start to die off.



Nirvana[®] offers highly cost-effective non-selective weed control:

Good crop safety ✓

Controls a wide range of grass and broadleaf weeds ✓

Flexible application timing ✓

Can be mixed with residual herbicides ✓

RECOMMENDED USES:

WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
Annual Poa, asparagus seedlings, beaked hawksbeard, black nightshade, Calandrinia, chickweed, cleavers, clover seedlings, combind, daisy, dandelion, mouse-ear chickweed, musky storksbill, redroot, rough stalked meadow grass, scotch thistle, sow thistle, staggerweed, summer grass, spurrey, stinking mayweed, subterranean clover, wild turnip, willow weed and wireweed.	3-5 litres/ha	The lower rates indicated are appropriate when weeds are young, succulent and actively growing, or when the weed population is sparse and good coverage and penetration are possible.
Bristle grass, bur medic, catsear, chewings fescue, clovers, cut leaved Geranium, docks, fleabane, parsley piert, prairie grass, ryegrasses*, sheeps sorrel, storksbill, strawberry, twin cress and Yorkshire fog.	5-7.5 litres/ha	Use the higher rates when weeds are mature or the population is dense.
Broom, buttercups*, couch, field pansy, crowfoot grass, gorse, hawksbeard, kikuyu grass, mallows, paspalum, tall fescue, wild strawberry, willow herb and yarrow.	7.5-10 litres/ha	
Bracken, meadow rice grass, plantains, rape, rushes, sedges and Indian doab.	10 litres+/ha	

*Hairy buttercups and some ryegrass strains are resistant.

OTHER SITUATIONS:

SITUATION	RATE	DIRECTIONS FOR USE
Berryfruit, raspberries and brambles Primocane control	500-750ml per 100 litres water	Apply through cone nozzles in sufficient water to ensure complete coverage of primocanes. Apply as directed high volume spray to primocanes not exceeding 25cm in length. Avoid drift onto foliage of fruiting canes. Use the high rate on vigorously growing crops. The addition of a non-ionic surfactant is recommended. "Knockdown" takes approximately 10 days. Do not apply to plants before the first primocanes for the season have reached 15cm in length. Do not apply to plants under stress.
Non-selective weed control Non-crop land	7.5-10 litres in 300-500 litres of water/ha or 100ml/10L knapsack	Apply as a drenching spray to just before run-off. Residual herbicides may be added for long term weed control.
Orchards, vineyards, citrus, grapes, kiwifruit, pipfruit and stone fruit	Use a rate appropriate to the weeds present.	If the dilution rate is less than 1 litre/100 litres of water add an adjuvant at label rates. Apply in spring when the majority of weeds have germinated. Residual herbicides may be applied in mixture for longer term weed control. Avoid contact with foliage and immature bark of desirable plants.
Stale seedbed – Particularly where clover is a problem	3-5 litres in 200-300 litres of water/ha	Apply to seedling weeds and clover to achieve complete coverage. May be applied up to 1 day before crop emergence.

Mode of Action: A primarily contact herbicide which is taken in to the plant via the foliage and green stems and is not translocated. There is no action via the roots and no soil residual effect. Optimum activity is obtained under warm conditions favourable for active plant growth - 10°C+. **NIRVANA** disrupts ammonium metabolism in the plant shortly after application resulting in an accumulation of ammonium in plant cells and the inhibition of photosynthesis. Light and warm temperatures accelerate the rate of action. Early symptoms of pale yellow progress to wilting and death within 1-2 weeks. **Drift:** Apply this product carefully. Spray drift may cause serious damage to other desirable plants. **Crop:** Avoid contact with green parts of desirable plants including immature bark as damage may occur. Do not spray in temperatures below 10 degrees celsius. Do not mow or cultivate after treatment until weeds begin to die off. **Withholding period:** 28 days all crops. **Rainfall:** **NIRVANA** requires at least 6 hours drying to be fully effective. **Surfactant:** Add a surfactant at label recommended rates when treating primocanes and when the dilution rate of **NIRVANA** is less than 1 litre per 100 litres of water. **Compatibility:** May be tank mixed with most commonly used residual herbicides.

Application: Apply with equipment capable of achieving complete coverage of target plants. Use sufficient pressure to penetrate the weed mass. **Sprayer Clean-up:** To avoid injury to subsequently sprayed sensitive crops, flush sprayer with several rinses of clean water after use.

RESISTANT WEEDS WARNING: Naturally occurring weed biotypes can become more prevalent after many years of continuous use. To delay the onset of, or control resistant weeds, use in rotation with herbicides of different mode of action. Since the occurrence of resistant weeds is difficult to detect prior to use Adria New Zealand Ltd accepts no liability for losses that may result from the failure of this product to control resistant weeds.

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