

IMPORTANT

Injury to or loss of desirable trees or other plants may result from failure to observe the following. **DO NOT** apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. **DO NOT** use on lawns, walkways, driveways, tennis courts or similar areas. Application to drains or irrigation channels must only be made when these waterways are dry and at least two months is allowed to elapse before the channels are used to carry water. Prevent drift of granules or spray to desirable plants. Keep from contact with fertilisers, insecticides, fungicides and seeds.

RESISTANCE MANAGEMENT

Ranger Herbicide is a member of the sulfonylurea group of herbicides. Naturally occurring biotypes resistant to sulfonylurea herbicides are known to exist. These resistant weeds will not be controlled by Ranger Herbicide or other sulfonylurea herbicides. Consult www.resistance.nzpps.org/ for alternative modes of action and details of resistance management strategies (if any).

To prevent or delay development of resistant weeds use Ranger Herbicide in tank mixes (if appropriate) and/or rotations with herbicides having different modes of action effective on the same weed species. Since occurrence of resistant weeds is difficult to detect prior to use,

Rainbow & Brown accepts no liability for any losses that may result from failure of Ranger Herbicide to control resistant weeds.

Registered pursuant to the ACVM Act 1997, No. P7668.

See www.foodsafety.govt.nz for conditions of registration.

Approved pursuant to the HSNO Act 1996, Approval Code HSR007774.

See www.epa.govt.nz for approval controls.

CONDITIONS OF SALE: This product is warranted by Rainbow & Brown Limited to conform to the chemical description and concentration specified on the label, and to be reasonably fit for the purposes stated in the directions if used in accordance with the directions. The user bears all risks of damage or failure resulting from factors beyond the control of Rainbow & Brown. Rainbow & Brown declines all liability for any damages resulting from the improper use of this product.

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24-HOUR EMERGENCY

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GENERAL INSTRUCTIONS

Ranger Herbicide is a dry flowable granule to be mixed with water and applied as a foliar spray for control of buttercups and docks in pasture and cereals. It can also be used for conservation tillage. Best results are obtained in the spring when weeds are actively growing within a vigorous, competitive pasture or cereal crop. Ranger Herbicide stops growth of susceptible weeds, however typical symptoms (discolouration) of dying weeds may not be noticeable for 2-3 weeks after application. Do not apply Ranger Herbicide to pasture or cereal crops that are stressed by weather conditions such as drought, frost, water saturated soil or insect attack, otherwise crop damage

may occur. Do not apply to grass or clover seed crops or hay crops.

DIRECTIONS FOR USE

Mixing Instructions

Ranger Herbicide mixes easily with water. For best results, follow this procedure: Using the measuring guide provided, measure the correct amount of product required for the area to be sprayed and add to the tank containing the appropriate amount of water to cover that area. Agitation is required during mixing and application. Use Ranger Herbicide spray mixes within 24 hours of preparation as product degradation may occur after that time.



APPLICATION GUIDELINES

READ THIS LEAFLET AND THE
PRODUCT LABEL COMPLETELY
BEFORE MIXING OR APPLYING
THIS PRODUCT



Accurate measuring

Due to normal variations in density of this product and the small amounts typically being measured, it is always best to weigh out the product using accurate scales. If scales are not available, use the supplied measuring cylinder and the following conversion scale:

Ranger Required	Cylinder Scale
5g	7.5mL
10g	15mL
20g	30mL
30g	45mL
40g	60mL
50g	75mL

Spray Volumes

Use a well-maintained, accurately calibrated sprayer. A range of 60-300 litres per hectare is recommended. Avoid overlapping and shut off spray booms when starting, slowing or stopping otherwise pasture/crop damage may occur.

Knapsack Application

Mix 1g Ranger Herbicide in 10L water and apply to 500m².

Resistant Weeds

Includes thistles, plantains, dandelion and ragwort. If these weeds are a problem add a herbicide with an approved label claim for the control of these species.

Compatibility

Ranger Herbicide is compatible with MCPA, MCPB, 2,4-D and glyphosate. However, a reduction in long-term control of docks has occurred when tank mixed with 2,4-D or MCPA.

Effects on Pasture

Yellowing and reduction in vigour of pasture species usually occurs following the application of Ranger Herbicide. Complete recovery, particularly of clovers, may take up to 4 months, depending on pasture vigour before spraying and growing conditions afterwards.

WHEAT, BARLEY, OATS

Apply 20g Ranger Herbicide per hectare plus surfactant at any time after the crop is in the two-leaf stage but before the boot stage. For best results apply to *small actively growing weeds* before the crop canopy closes in. Where treatment is delayed or where weeds are not actively growing due to adverse conditions, weeds may be stunted or suppressed only. The following weeds are controlled by Ranger Herbicide: Docks, buttercups (annual), creeping buttercup, cornbind.

CONSERVATION TILLAGE

(Forage brassicas, cereals, new pastures, peas, potatoes, squash, maize, lucerne)

For control of buttercups and docks use Ranger Herbicide at 20g per hectare in combination with glyphosate that has a label claim for conservation tillage, applied before the crop is sown. **DO NOT** sow crops within 14 days of applying Ranger

PASTURE (grass/clover)

Apply Ranger Herbicide 1-2 weeks after the area has been grazed, when the maximum number of seedlings and young plant are present. Rain occurring up to 4 hours after application may reduce effectiveness of the product.

Weed Species	Rate g/ha	Comments
Docks	20	Spray in spring, when docks are in full leaf. DO NOT spray after seed heads begin to emerge or immediately after grazing. Well established docks with large root systems may require a follow up treatment.
Buttercups (annual) and creeping Buttercup	20	Apply in spring when weeds are actively growing.
Giant buttercup	20	Apply during spring. Follow up treatments may be necessary.

Herbicide. **Note:** Transient damage may occur on some crops sown following the application of Ranger Herbicide, but this is unlikely to affect crop yields. However, trials have shown that perennial ryegrass may be reduced in growth.

It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

WITHHOLDING PERIOD

Do not graze treated areas for 7 days after application.

SPRAYER CLEANUP

To avoid subsequent injury to crops, after spraying thoroughly remove all

traces of Ranger herbicide from the spray equipment as follows:

1. Drain tank, then flush tank, boom and hoses with clean water for a minimum of 10 minutes.
2. Fill the tank with clean water and add 1L chlorine bleach (containing 3% solution sodium hypochlorite) per 100L water. Flush through with agitation, then drain.
3. Repeat step 2.
4. Nozzles and screens should be removed and cleaned separately. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush through hoses and boom.