

PLEASE READ THE LABEL COMPLETELY BEFORE USE
WARNING
KEEP OUT OF REACH OF CHILDREN

TOUCHDOWN[®] IQ

HERBICIDE

Active Ingredient: TOUCHDOWN IQ contains 500 g/litre GLYPHOSATE as the potassium salt in the form of a soluble concentrate.

For the control of a wide range of annual and perennial Grass and Broadleaf weeds in Agriculture, Horticulture, Forestry, Industrial areas, Recreational areas and for other uses including general weed control.

Pack size: 20 and 200 litres

Registered pursuant to the ACVM Act 1997, No. P7026.
See www.nzfsa.govt.nz/acvm/ for registration conditions

Approved pursuant to the HSNO Act 1996, Approval Code HSR000016.

Syngenta Crop Protection Limited
Tower 2, Level 7, 110 Symonds Street, Auckland

UN-3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: glyphosate solution)
MARINE POLLUTANT, PACKING GROUP III, HAZCHEM 2X, CONTAIN SPILLAGE

In a transport emergency dial 111, Police or Fire Brigade. For specialist advice in an emergency only, call 0800 734 607 (24 hours).

This product **MUST NOT** be used for any purpose or in any manner contrary to the controls and conditions of this registration.

HSNO Classifications 6.5B, 9.1D

WARNING

May cause sensitisation from prolonged skin contact.
Harmful to aquatic organisms.

PRECAUTIONS

Store in original container, tightly closed, away from foodstuffs.
Wear eye protection and rubber gloves when mixing and applying.
Avoid contact with eyes and skin.
DO NOT smoke, eat or drink while using this product.
Avoid breathing spray drift.
Wash hands and exposed skin before meals and after work.
Wash clothing before reuse.
Apply with well maintained and calibrated spray equipment.
Application and storage keeping should be as described in the Management of Agrichemicals NZS8409.
Avoid contamination of any water supply with chemical or empty container.

Container disposal: Ensure the container is empty. Triple rinse the container and add the residue to the spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point. Alternatively, if allowed under local Territorial Authority District Plans, burn if circumstances, especially wind direction permit, otherwise crush and bury in an approved local authority facility. DO NOT reuse this container for any other purpose.

Product disposal: Dispose of this product only by using according to the label, or at any approved landfill or other approved facility.

FIRST AID

If swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if breathing has stopped. Use mouth to nose rather than mouth to mouth. Obtain medical attention. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. DO NOT scrub the skin. If splashed in the eyes, wash out immediately with water. If inhaled, move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped.

SPILLAGE

Wear suitable protective clothing including face shield, impervious gloves and boots. Prevent the product or spilled material from entering water bodies. Absorb liquid spills with inert material such as earth or sand and place in waste containers. Wash area with water and absorb with further inert material. Dispose of safely.

GENERAL INFORMATION

- TOUCHDOWN IQ is a non-selective foliar applied herbicide for use in: agriculture before planting crops, pasture, vegetables or trees, in conservation tillage systems, in orchards, kiwifruit, vineyards, market gardens and forestry, and in industrial or non-agricultural areas, and recreational areas including home gardens.
- Avoid contact with foliage or green stems of fruit or crops, desirable plants and trees since severe injury or destruction may result. Avoid application in winds which allow drift onto desirable plants. Read the entire label before using this product.
- TOUCHDOWN IQ is a non-volatile water soluble liquid with non-selective herbicidal activity against many annual and perennial broadleaf weeds and grasses.
- TOUCHDOWN IQ is absorbed by plant foliage and green stems. It is inactivated immediately by soil particles and does not provide residual weed control.
- TOUCHDOWN IQ is translocated from treated vegetative growth to and into underground roots, rhizomes or stolons. Visible symptoms may take up to 14 days or even longer depending on growing conditions.
- Visible effects are a gradual wilting and yellowing of the foliage which advances to deterioration of both above and below ground parts.
- Delay application until the weeds are in the growth stage described in the "Weeds Controlled" section of this label. Plants arising from unattached rhizomes or rootstocks of perennial weeds will not be affected by the spray and will continue to grow. For this reason best control of most perennial weeds is obtained at late growth stages approaching maturity.
- Ensure weeds are actively growing with sufficient leaf area to achieve optimum herbicide uptake.
- DO NOT treat weeds under poor growing conditions, when they are stressed, or if they are covered in dust or silt as reduced results may occur.
- Rainfall occurring up to 2 hours after application may reduce effectiveness.

BEWARE: Apply this product carefully. Spray drift may cause serious damage to other desirable plants.

MIXING

Use only clean, soft water. Use of pond, ditch or irrigation race water containing soil/silt particles or hard water containing calcium salts may reduce efficacy. Fill the clean spray tank two thirds full with water. Add the required volume of TOUCHDOWN IQ and agitate. Complete filling the tank with the hose end under the surface to minimise frothing.

May be tank-mixed with suitable residual herbicides. DO NOT mix with fast acting contact chemicals such as GRAMOXONE®, PREEGLONE® or REGLONE®. DO NOT add additional surfactant or oils except as directed on this label.

APPLICATION

AVOID direct or indirect contact (through spray drift) of desirable plants.

Boom Application: Use the recommended rate of TOUCHDOWN IQ in approximately 200 litres of water per hectare. The amount of water will vary depending on the density and size of weeds to be controlled.

For broadacre boom application, flat fan wide angle nozzles using 200 to 280 kPa are preferred. Ensure that boom height is set so as to achieve a double overlap of spray pattern at the top of weed canopy.

Knapsack and Handgun Application: Select or adjust nozzle(s) to give a fine spray without causing undesirable drift. Use the minimum volume necessary to achieve uniform and complete coverage without run off.

Wiper Application: TOUCHDOWN IQ can be applied through hand held or machine mounted rope wick equipment. There must be sufficient height differential between the target weed and crop/pasture to allow maximum contact of the wiper onto the weeds without touching desirable vegetation.

Mix 1 part TOUCHDOWN IQ with 2 parts clean water. In heavy weed infestations or when treating perennial weeds, a double pass in opposite directions will give better results. As weed density increases, decrease ground speed.

ADDITIVES

An organo-silicone surfactant may be used with TOUCHDOWN IQ to improve rate of uptake when treating perennial ryegrass. An organo-silicone surfactant/penetrant is also recommended for use when treating some scrub weeds. Refer to "Weeds Controlled" section for recommended rates.

STORAGE

Store in the closed, original container in a cool, dry, well ventilated area. DO NOT store for prolonged periods in direct sunlight. When stored appropriately, this product should show no significant degradation for 2 years from the date of manufacture. Contact your supplier for further information about the use of any product older than this. See Safety Data Sheet for additional storage information. Stores containing quantities of 10,000 litres or more require signage and 1,000 litres or more secondary containment.

SAFETY DATA SHEET

If additional hazard information is required, refer to the Safety Data Sheet. For a copy, visit our website at www.syngenta.co.nz

WARRANTY

This formulation is warranted to contain the specified active ingredient within accepted analytical tolerance when packed. The user bears the risk for damage resulting from factors beyond the manufacturer's control. The manufacturer declines all liability for damage resulting from improper storage or use of the product.

® TOUCHDOWN IQ, BANVEL, GARDOPRIM, GESAPRIM, GESATOP, GRAMOXONE, PREEGLONE and REGLONE are the registered trademarks of a Syngenta Group Company.

Distributed by and registered to Syngenta Crop Protection Limited, Tower 2, Level 7, 110 Symonds Street, Auckland.

DIRECTIONS FOR USE

Note: Refer to the "Weeds Controlled" section on this label for specific rates of application.

GENERAL WEED CONTROL

Situation	Weeds Controlled	Rate	Critical Comments
Handgun	General weed control	650 ml in 100 litres of water	Apply to completely wet the foliage but not to run off.
Knapsack	General weed control	100 ml in 15 litres of water	Apply to completely wet the foliage but not to run off.
Smaller Sprayers	General weed control	7 ml per every 1 litre of water	Apply to completely wet the foliage but not to run off.

AGRICULTURAL AREAS

Situation	Weeds Controlled	Rate	Critical Comments
Spray cultivation / conservation tillage	Annual Weeds	650 ml to 1.3 litres/ha	Apply to completely wet the foliage but not to run off.
	Pasture	650 ml to 2 litres/ha	Apply to completely wet the foliage but not to run off.
	White clover	Tank-mix with a suitable white clover herbicide e.g. BANVEL®	Where BANVEL is used observe the waiting periods prior to planting subsequent crops.
For vegetation control prior to planting crops or pasture	Annual and Perennial weeds	650 ml to 2 litres/ha	May be used for the control of weeds as directed in agricultural areas, prior to sowing any edible or non-edible crop. Cultivation may commence from 5 days after spraying perennial weeds and 3 days for annual weeds.

CROP RECOMMENDATION

Crop	Weeds Controlled	Rate	Critical Comments
Asparagus	General weeds	See "Weeds Controlled" table	TOUCHDOWN IQ can be applied following the final harvest and immediately after removal of spears but before crop regrowth occurs. May also be used prior to planting or crop emergence (DO NOT treat emerging spears) and in established ferns as a directed or shielded spray or with wiper equipment.
Forestry	Scrub weeds, Grasses, Broadleaf weeds	See "Weeds Controlled" table	For site preparation prior to forest and/or nursery plantings. For pre-burn desiccation in situations such as re-forestation. As a directed or shielded spray (or with wiper equipment) amongst established trees. For residual control TOUCHDOWN IQ can be tank mixed with GESATOP® 500FW, GARDOPRIM® 500FW or another approved residual herbicide. DO NOT allow spray, spray drift or the wiper surface to contact foliage or green bark of desirable trees as severe injury may result.
Industrial and Non-Agricultural Areas	General weeds	See "Weeds Controlled" table	For residual control TOUCHDOWN IQ can be tank mixed with GESATOP 500FW, GESAPRIM® 500FW or another approved residual herbicide. Follow all precautions for the residual herbicide used.
Market Gardens	Annual and Perennial weeds	See "Weeds Controlled" table	TOUCHDOWN IQ can be applied before or after seeding but prior to crop emergence. Can also be applied prior to transplanting or as a post-harvest clean-up. For longer term control of seedling weeds, TOUCHDOWN IQ may be mixed with other suitable residual herbicides. Use in accordance with the label recommendations for those products.
Orchards Citrus, Grapevines, Kiwifruit, Pipfruit, Stonefruit	General weeds	See "Weeds Controlled" table	Apply TOUCHDOWN IQ as a directed or shielded spray or with wiper equipment. For longer term weed control TOUCHDOWN IQ may be tank mixed with a suitable residual herbicide eg GESATOP 500FW. Note: DO NOT apply near unprotected trees less than 3 years old. DO NOT allow spray drift to contact any part of stonefruit trees, or green bark, suckers, buds foliage or fruit of other trees. DO NOT allow wiper surfaces to contact any part of the trees.
Pasture	Various weed species	See "Weeds Controlled" table	Direct (spot) application. TOUCHDOWN IQ is non-selective and may damage or kill any plant growing within the sprayed area. Re-treatment and/or pasture improvement may be required to restrict seedling re-establishment.
	Erect weeds	See "Weeds Controlled" table	Selective wiper application.
	Scrub weeds	See "Weeds Controlled" table	Refer to "Weeds Controlled" table for specific recommendations.
Pasture Renovation	Existing pasture species	See "Weeds Controlled" table	To control weeds prior to re-seeding pasture or establishing other crops.
Threshing Peas	Pre-harvest desiccation	Up to 2.7 litres/ha depending on the specific weeds present	Apply TOUCHDOWN IQ 10 to 14 days before harvesting when the pods have dried. Only peas for threshing should be treated, with application occurring no less than 10 days before harvest to allow optimum herbicide translocation into weed roots. DO NOT treat crops which will be harvested for seed or undersown crops, as undersown plant species including clovers may be severely damaged. Avoid treating if such weeds are drought stressed.

Crop	Weeds Controlled	Rate	Critical Comments
Turfgrass, Recreational Areas, Garden Areas	General weeds	See "Weeds Controlled" table	Apply TOUCHDOWN IQ before establishing lawns, parks, reserves and ornamentals. May also be used as a directed, shielded or wiper application around trees, shrubs or other ornamental plants and as a spot, directed or shielded treatment in rockeries, paths and garden beds. Note: DO NOT allow spray, spray drift or the wiper surface to contact trees, shrubs or other desirable plant species. In mown areas, allow sufficient regrowth before spraying.

WEEDS CONTROLLED

Annual and Perennial Weeds

Weed	Boom litres/ha	Handgun Vol/100 litres	Knapsack ml/15 litres	Critical Comments
Annual weeds	650 ml to 1.3	130 ml	20	Use the higher rate for larger weeds.
Barley Grass (<i>Hordeum murinum</i>)	650 ml	130 ml	20	Apply early vegetative to green seedhead stage.
Browntop (<i>Agrostis capillaris</i>)	2	330 ml	50	Apply to 5 to 10 cm high actively growing plants.
Californian Thistle (<i>Cirsium arvense</i>)	2.7	650 ml	100	Apply after flower bud development but before autumn browning to optimise herbicide translocation. Wiper - In heavy infestations a double pass at low speed is recommended.
Cocksfoot (<i>Dactylis glomerata</i>)	2 to 2.7	330 ml	50	Apply to actively growing plants in spring to autumn. Use the higher rate on large clumpy plants or under cold or slower growing conditions.
Couch (<i>Elytrigia repens</i>)	2 to 4	650 ml	100	Apply to plants which have 4 to 5 leaves and are actively growing. For suppression use 2 litres/ha, for control use 2.7 to 4 litres/ha. Use the high rate for spring applications. DO NOT cultivate for 6 months prior to application to ensure maximum emergence of shoots.
Docks (<i>Rumex</i> spp.)	2.7	650 ml	100	For control of seedling and young plants, apply in spring/early summer when plants are actively growing.
Indian Doab (<i>Cynodon dactylon</i>)	6	650 ml	100	Apply when at early flowering and growing actively.
Johnson Grass (<i>Sorghum halepense</i>)	4	650 ml	100	Apply when actively growing.
Kikuyu (<i>Pennisetum clandestinum</i>)	3.3	650 ml	100	Apply to actively growing plants from October to April.
Paspalum (<i>Paspalum dilatum</i>)	2 to 4	650 ml	100	Apply at early flowering and when growing actively. Use the low rate for seedling plants.
Potato - self set (<i>Solanum tuberosum</i>)	2	330 ml	50	Apply upon maximum emergence of self-sets in spring to summer.
Prairie Grass (<i>Bromus willdenowii</i>)	1.3	130 ml	20	Apply when actively growing.

Weed	Boom litres/ha	Handgun Vol/100 litres	Knapsack ml/15 litres	Critical Comments
Rautihi - Cutty Grass (<i>Carex</i> spp.)	2.7 to 3.3	650 ml	100	Apply from January to March to actively growing plants. Ensure thorough coverage. Burning or slashing may be undertaken after brownout of plants, followed by oversowing. Use higher rate in tall dense situations.
Ryegrass perennial (<i>Lolium perenne</i>)	1 to 2 plus organo-silicone at label rates	330 ml plus organo-silicone at label rates	50 plus organo-silicone at label rates	Apply when plants are 3 to 10 cm high and actively growing. Use the low rate January to July when cultivation is to follow spraying. Use 2 litres/ha from August to December. Use an organo-silicone surfactant at all times.
Ragwort (<i>Senecio jacobaea</i>)	4	650 ml	100	Apply when plants are actively growing. Wiper - See application instructions. Caution - Ragwort plants may become more palatable after spraying. Stock should be removed until treated plants brown off.
Rushes (<i>Juncus</i> spp.)	2.7 to 4	650 ml	100	Apply to actively growing plants from January to March. Wiper - See application instructions.
Sweet Vernal (<i>Anthoxanthum odoratum</i>)	1.3 to 2	330 ml	50	Apply when actively growing.
Tall Fescue (<i>Festuca arundinacea</i>)	3.3	650 ml	100	Apply when actively growing during spring to autumn.
Yorkshire Fog (<i>Holcus lanatus</i>)	2	330 ml	50	Apply when plants are actively growing.
Yarrow (<i>Achillea millefolium</i>)	2 to 4	-	-	Apply to plants with 5 to 10 cm leaf. For seedling control or where cultivation and the establishment of a subsequent competitive crop is to follow spraying, use the 2 litres/ha rate. In all other situations or when a poor competitor crop is to be drilled, use the 4 litres/ha rate.

Scrub/Brushweeds

Weed	Boom or Aerial litres/ha	Handgun Vol/100 litres	Knapsack ml/15 litres	Critical Comments
Blechnum Fern (<i>Blechnum</i> sp.)	6 plus organo-silicone at label rates	650 ml plus organo-silicone at label rates	100 plus organo-silicone at label rates	Apply after fronds unfurl but prior to any frost browning (usually January to June period).
Bracken (<i>Pteridium esculentum</i>)	4 to 6 plus organo-silicone at label rates	650 ml plus organo-silicone at label rates	100 plus organo-silicone at label rates	Apply after fronds unfurl but prior to any frost browning (usually January to June period). Use the higher rate in dense situations where old leaf trash exists or alternatively, burn in winter-spring period and spray fresh regrowth.
Broom (<i>Cytisus scoparius</i>)	6 plus organo-silicone at label rates	650 ml plus organo-silicone at label rates	100 plus organo-silicone at label rates	Aerial applications are best made when plants are in full leaf and actively growing. Handgun spraying may be undertaken at any time.
Buddleja (<i>Buddleja</i> sp.)	6 plus organo-silicone at label rates	650 ml plus organo-silicone at label rates	100 plus organo-silicone at label rates	Aerial applications should be made from January to April to plants with actively growing and well developed new season lateral growth. If actively growing handgun spraying may be undertaken at any time.

Weed	Boom or Aerial litres/ha	Handgun Vol/100 litres	Knapsack ml/15 litres	Critical Comments
Gorse (<i>Ulex europaeus</i>)	6 to 8 plus organo-silicone at label rates	650 ml plus organo-silicone at label rates	100 plus organo-silicone at label rates	Handgun: Spray to achieve complete coverage at any time of year. Aerial: (Pre-burn treatment only) In land renovation areas or forestation sites where burning is planned, spray 4 to 6 months prior, to ensure adequate brownout and stem dehydration is achieved for an optimum burn. Some gorse re-establishment can occur from seed or old rootstocks which may require respraying by aerial or spot treatment. Re-spraying operations should be considered prior to oversowing for pasture re-establishment purposes. Use the higher rate of TOUCHDOWN IQ for large, more dense gorse cover using double pass-half overlap technique. A water rate of 200 to 300 litres/ha is recommended.
Himalayan Honeysuckle (<i>Leycesteria formosa</i>)	6 plus organo-silicone at label rates	650 ml plus organo-silicone at label rates	100 plus organo-silicone at label rates	Apply to actively growing plants with well developed new season lateral growth but prior to any autumn-winter defoliation.
Ringfern (<i>Paesia scaberula</i>)	650 ml	130 ml	20	Use 650 ml/ha from January to April for ring fern control. For pasture renovation/manipulation, other broadleaf or grass weed species may exist for which control is required in addition to ring fern. This may determine the need for a higher use rate (following their identification, refer to this "Weeds Controlled" panel for rate recommendation). Burn 4 to 6 weeks after treatment and oversow with pasture species.
Toetoe / Pampas Grass (<i>Cortaderia</i> sp.)	6 plus organo-silicone at label rates	650 ml	100	Apply spring to autumn. Ensure complete wetting of foliage. Best results are achieved when sprayed after flowering. Poor control may occur if sprayed while plants are in flower.
Tutu (<i>Coriaria</i> sp.)	4 plus organo-silicone at label rates	650 ml	100	Apply November to May to actively growing plants.

WITHHOLDING PERIODS

A withholding period for grazing stock is not required. Stock can be grazed one day after treatment of annual weeds or three days if perennial weeds are present to ensure absorption of TOUCHDOWN IQ.