

DANGER - KEEP OUT OF REACH OF CHILDREN. ECOTOXIC



INSECTICIDE GROUP 3

Halex^{cs}

Synthetic pyrethroid for insect control in a variety of crops, amenity turf, ornamentals and public health situations



Registrant: Ravensdown Ltd 292 Main South Road Hornby, Christchurch 8042 New Zealand Phone: 03 353 4600

ravensdown.co.nz

ACTIVE INGREDIENT:

BATCH

DOM

Contains 250g/litre lambda-cyhalothrin in the form of a capsule suspenion.



ravensdown Image: Construction of the second se



This product must not be used for any purpose, or in any manner, contrary to the label unless authorised under appropriate legislation.

6.1C, 6.3B, 6.4A, 6.9A, 9.1A, 9.3B, 9.4A	HANDLING PRECAUTIONS
QUALFIED PERSON: This product must be under the control of a Qualified Person or Contractor, as per Part 4C of the Hazardous Property Controls EPA Notice. TOXICITY Danger - Toxic if swallowed. Harmful if inhaled. Causes organ damage from repeated oral exposure at high doses. Harmful - Causes skin and eye irritation, avoid contact with skin and eyes. ECOTOXICITY Very toxic to aquatic organisms. Avoid contamination of any water supply with chemical or empty container. Toxic to terrestrial vertebrates. Evolution of the toxic to terrestrial invertebrates. Toxic to bees. Spray must not contact plants in flower if they are likely to be visited by bees. Do not apply directly into or onto water. Pollinators: When applied during non-foraging periods such as early morning or evening, application will not interfere with the activity of honey bees once the spray has dried, other than causing a short 2-3 day reduced foraging effect.	STORAGE Store in a cool dry place, avoiding temperatures above 35°C. Store in original container, tightly closed, away from foodstuffs. Keep out of reach of children. Store in accordance with NZS 8409 Management of Agrichemicals. PERSONAL PROTECTION Avoid contact with skin, eyes and do not inhale spray mist. When handling wear full protective clothing such as chemically resistant gloves and boots, respirator, eye protective clothing and wash hands and face thoroughly before meals and after work. Do not eat, drink or smoke while using. EQUIPMENT Apply using well maintained and accurately calibrated equipment. Flush equipment thoroughly with clean water after use. RECOD KEEPING Records of use as described in NZS 8409 Management of Agrichemicals must be kept. DISPOSAL Triple rinse container and add rinsate to spray tank. Triple rinsed containers containing the taken to an Agrecovery collection site for disposal. Otherwise crush or puncture and bury in an approved landfill. Do not burce container for any other ourspace.

product only by using according to label or dispose of safely at a managed landfill.

Registered pursuant to the ACVM Act 1997, No.P8072. See www.foodsafety.govt.nz for registration conditions. Approved pursuant to the HSNO Act 1996, Code: HSR000336. See www.epa.govt.nz for approval controls. Registered to: Agri Solutions Ltd, Level 1, 26 Crummer Road, Grey Lynn, Auckland 1021





GENERAL DIRECTIONS

HALEX^{CS} is a fast acting stomach and contact insecticide. HALEX^{CS} is relatively stable to degradation in sunlight and hence gives extended control of insects on plant surfaces. It has short persistence in the soil. As HALEX^{CS} is primarily a contact insecticide, thorough coverage of plants is important for optimum results. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

It is an offence to use this product on animals.

MIXING

Pour the measured quantity of HALEX^{\sim} into a partly filled tank and agitate the spray mixture while adding the remaining water. Maintain agitation during spraying. If applying HALEX^{\sim} in mixture, always add the HALEX^{\sim} last.

NOTE: Add a Non-ionic spreader-sticker such as Widespread 1000 at label rates once the spray tank is nearly filled.

COMPATIBILITY

HALEX^{CS} mixes readily with water and is compatible with commonly used fungicides except strong alkaline materials such as Bordeaux mixture and lime sulphur.

APPLICATION

HALEX^{CS} may be applied through all conventional ground and aerial spray equipment, calibrated to ensure thorough coverage of the crop.

WITHHOLDING PERIODS

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.

Beans	. 3 days
Citrus	. Avoid contamination of fruit
Cereals (grain)	. 70 days
Cereals (barley and wheat forage)	. 28 days
Field Tomatoes	. 3 days
Fodder Beet	. Seedlings only
Forage Brassicas	. DO NOT allow stock to graze within 14 days of last
	application
Grapes	
Maize, Sweet Corn	. Seedlings only
Onions	. 14 days
Potatoes, Kumara	. 14 days
Pumpkins, Winter Squash	. Seedlings only
Vegetable Brassicas	. 3 days

White Clover seed crops	. DO NOT allow stock to graze within 70 days of last application
	DO NOT re-enter treated areas until spray has dried After HalexCS has dried - usually 4-6 hrs after application, aerate domestic dwellings before allowing re-entry of people & pets.

FIRST AID

If medical advice is needed, have product container or label at hand. If swallowed, Rinse mouth. DO NOT induce vomiting. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. DO NOT scrub the skin. If skin irritation occurs: Get medical advice/attention. If splashed in eyes, wash out immediately with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled, move the patient to fresh air immediately. Begin artificial respiration if breathing has stopped. For advice, contact the National Poisons Centre 0800 PDISON (0800 764 766) or a doctor if you feel unwell.

SPILLAGE

In case of spillage, wear appropriate protective clothing and prevent material from entering waterways. Exclude non-essential people from the area. Contain liquid spills and absorb with inert material such as soil or sand and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely in an approved landfill.

EMERGENCY RESPONSE

In transport emergency call 111, Police or Fire Brigade. For 24hr specialist advice in an emergency only call **0800 CHEMCALL (0800 243 622).**

SAFETY DATA SHEET

If additional safety information is required, refer to the Safety Data Sheet. For a copy contact the customer centre on 0800 100 123.

SHELF LIFE

When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

RESISTANCE MANAGEMENT

HALEX^{CS} contains lambda-cyhalothrin, a GROUP DINSECTICUE belonging to the pyrethroids chemical group with the sodium channel modulators nerve action mode of action. Resistance to this product may develop from excessive use. To minimise this risk use strictly in accordance with label instructions and resistance management strategies (www.resistance. nzpps.org/) that exist for any insect pest listed on the label. Avoid using this insecticide exclusively all season and avoid unnecessary spraying. Maintain good cultural control practices.

DIRECTIONS FOR USE

The rates suggested are for high volume spraying to run-off. For concentrate spraying, adjust dilution rate accordingly.

Situation	Pest	Rate	Critical comments
Beans	Tomato fruitworm	40ml/ha in a minimum of 500L of water/ha	Apply when insects first appear and if necessary 2 to 3 weeks later.
Beans, forage brassicas, onions, maize*, sweetcorn*, pumpkins*, winter squash*, tomatoes, vegetable brassicas, kumaras, fodder beet*	Cutworm	40ml/ha in a minimum of 300L of water/ha Aerial: Use 100 to 150L of water/ha	Apply immediately when damage occurs, preferably in the evening as a directed spray to thoroughly cover the base of the plants and the surrounding soil.
Cereals	Cereal aphid, rose grain aphid	20 to 40ml/ha in a minimum of 200L of water/ha	Apply at first sign of aphids. Apply the lower rate when aphid pressure is low and shorter residual activity is required. A second application may be needed if aphids continue to migrate into the crop. Ensure sufficient water volume is used to give thorough crop penetration and coverage.
Citrus	Fullers rose weevil	300ml/100L as a directed trunk spray	Apply sufficient spray to form a complete band around the trunk from the base to 30cm high, using up to 300 ml/trunk. Apply at monthly intervals, using directed spray equipment. Commence prior to adult weevil emergence from ground and continue over duration of pest activity, usually December to June unless otherwise ascertained by monitoring. Ensure trees are well skirted up and tree rows are free of weeds to assist in control.
Field tomatoes	Tomato fruitworm	40ml/ha in a minimum of 1000L of water/ha	Apply at three week intervals from transplanting or thinning.

*for use on seedlings only.

Situation	Pest	Rate	Critical comments
Forage & horticultural brassicas	Diamondback moth, white butterfly caterpillars	40ml/ha in a minimum of 700L of water/ha	Apply to seedbeds and following transplanting at two week intervals or as indicated by pest activity.
Grapes	Thrips	4ml/100L (DO NOT use less than 20 ml/ha)	Apply at early flowering. Apply in sufficient water to achieve good coverage of flower clusters.
	Bronze beetle, grass grub beetle	4ml/100L (DO NOT use less than 40 ml/ha)	Apply at dusk, when beetle flights begin. Apply in sufficient water to obtain coverage. Repeat after 14 days if flights are still continuing.
Kumara	Adult black beetle, adult white fringe weevil, caterpillars (e.g. tropical armyworm) 40ml/ha in a minimum of 500		

Onions	Onion thrip	40ml/ha in a minimum of 500L of water/ha	Apply at first sighting of Onion Thrip and repeat as necessary.
Potatoes	Potato tuber moth	40ml/ha in a minimum of 500L of water/ha	Apply at first sighting of moths then at 2 week intervals. Maintain adequate soil moisture and soil cover over developing tubers to assist prevention of tuber mining.
			Apply at first sign of psyllids then at 7 to 14 day intervals. Use the closer interval under high pressure. Ensure sufficient water volume is used to give thorough crop penetration and coverage.
White clover seed crops	Blue-green aphid, potato mirid, thrips	40ml/ha in a minimum of 200L of water/ha	Apply at first flower initiation, and repeat again 10 to 14 days later if required.

Situation	Pest	Rate	Critical comments
Amenity turf	Tasmanian grass grub, sod webworm, adult black beetle, red legged earth mite	4ml/100L or 40ml/ha	Apply at first sign of pest infestation and repeat as necessary if pest activity continues. Good coverage is necessary to provide most effective level of control.
Ornamentals	Aphids, caterpillars, thrips, bronze beetles, grass grub beetles, black beetles, weevils	4ml/100L of water	Apply at first sign of pest infestation and repeat as necessary if pest activity continues. Good coverage is necessary to provide most effective level of control. Phytotoxicity - it is advised to prespray a selection of plants and observe for 7-10 days prior to treating large areas if local experience is unavailable.

PUBLIC HEALTH SITUATIONS

Domestic, commercial, public and industrial premises e.g. hospitals, food processing plants, outdoor surfaces.

PEST

Ants, carpet beetles, cockroaches, fleas, flies, silverfish, spiders, woodlice.

RATE

20ml per 10L of water.

DIRECTIONS FOR USE

When spraying, sufficient diluent should be applied to wet all surfaces or to give approximately 40 ml spray per square metre. All surfaces frequented by pests should be sprayed including floors, walls and ceilings, with particular attention to areas where insects breed and hide such as cracks, crevices and warm areas surrounding equipment. Avoid spraying windows, highly polished surfaces or dark stained and painted surfaces, as visible spray deposits may remain upon drying. When treating carpets it is advisable to brush the treated area (ie back side of a broom) once spray deposits have dried, to work product into the pile where adult fleas and nymhs reside.

Residual control up to 3 months may be achieved depending on the pest, the surface to be treated and the influence of climatic weathering.

More regular treatment may be necessary where washing or rain removes insecticide residues and on alkaline surfaces such as plaster or unpainted surfaces.

NOTICE TO BUYER

The manufacturer and vendors of HALEX^{cs} warrant the formulation to contain the specified active ingredient within accepted tolerance but make no warranty of any kind on the uses of material and accept no responsibility, whether the material is used in accordance with the label directions or not.

ravensdown 🗭 HALEX^{cs}

READ LABEL CAREFULLY BEFORE USING SHAKE WELL BEFORE USE



This product must not be used for any purpose, or in any manner, contrary to the label unless authorised under appropriate legislation.

HAZARD CLASSIFICATION: 6.1C, 6.3B, 6.4A, 6.9A, 9.1A, 9.3B, 9.4A

QUALIFIED PERSON: This product must be under the control of a Qualified Person or Contractor, as per Part 4C of the Hazardous Property Controls EPA Notice.

TOXICITY

Danger - Toxic if swallowed. Harmful if inhaled. Causes organ damage from repeated oral exposure at high doses.

Harmful - Causes skin and eye irritation, avoid contact with skin and eyes. ECOTOXICITY

Very toxic to aquatic organisms. Avoid contamination of any water supply with chemical or empty container. Toxic to terrestrial vertebrates. Very toxic to terrestrial invertebrates. Toxic to bees. Spray must not contact plants in flower if they are likely to be visited by bees. Do not apply directly into or onto water.

Pollinators: When applied during non-foraging periods such as early morning or evening, application will not interfere with the activity of honey bees once the spray has dried, other than causing a short 2-3 day reduced foraging effect.

HANDLING PRECAUTIONS

STORAGE

Store in a cool dry place, avoiding temperatures above 35°C. Store in original container, tightly closed, away from foodstuffs. Keep out of reach of children. Store in accordance with NZS 8409 Management of Agrichemicals.

PERSONAL PROTECTION

Avoid contact with skin, eyes and do not inhale spray mist. When handling wear full protective clothing such as chemically resistant gloves and boots, respirator, eye protection and overalls. Wash splashes of concentrate from skin and eyes immediately. Remove protective clothing and wash hands and face thoroughly before meals and after work. Do not eat, drink or smoke while using.

EQUIPMENT

Apply using well maintained and accurately calibrated equipment. Flush equipment thoroughly with clean water after use.

RECORD KEEPING

Records of use as described in NZS 8409 Management of Agrichemicals must be kept. DISPOSAL

Triple rinse container and add rinsate to spray tank. Triple rinsed containers containing the Agrecovery logo on the label and that are free of all residues and have an intact legible label may be taken to an Agrecovery collection site for disposal. Otherwise crush or puncture and bury in an approved landfill. Do not burn container. Do not use container for any other purpose. Dispose of product only by using according to label or dispose of safely at a managed landfill.

Registered pursuant to the ACVM Act 1997, No.P8072. See www.foodsafety.govt.nz for registration conditions. Approved pursuant to the HSNO Act 1996, Code: HSR000336. See www.epa.govt.nz for approval controls. Registered to: Agri Solutions Ltd, Level 1, 26 Crummer Road, Grey Lynn, Auckland 1021

PHONE 0800 100 123



ELE MULTIFOLD'