

ECOTOXIC
Keep out of reach of children



Korvetto™

Arylex™ active

HERBICIDE

ACTIVE INGREDIENT:

Contains 5 g/L halauxifen-methyl plus 120 g/L clopyralid in the form of an emulsifiable concentrate. Also contains 240 g/L fatty acid dimethylamide.

GROUP	O3 O4	HERBICIDE
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A selective herbicide for the control of broadleaf weeds in forage brassicas

READ THIS LABEL COMPLETELY BEFORE MIXING OR APPLYING

NET CONTENTS: 1, 5, 10 and 20 L

Dow AgroSciences (NZ) Ltd*
89 Paritutu Road, Private Bag 2017, New Plymouth 4342
www.corteva.co.nz
Telephone: 0800 803 939



INFORMATION WITHIN THIS BOX IS NOT PART OF THE LABEL
Korvetto™ 30th November 2020

HAZARD CLASSIFICATION

3.1D, 6.3B, 6.4A, 6.9B, 9.1A, 9.2A.



QUALIFICATION REQUIREMENTS

Persons mixing, loading, applying, or otherwise handling Korvetto™ must meet qualification requirements set out in the EPA Hazardous Substances (Hazardous Property Controls) Notice 2017.

RECORD KEEPING

Records of use, as described in relevant HSNO regulations and the New Zealand Standard for the Management of Agrichemicals (NZS8409), must be kept if more than 3 L is applied or discharged within 24 hours in a place where members of the public may be present or where the substance may enter air or water and leave the place.

WARNING – Combustible liquid. Keep away from sources of ignition.

TOXICITY

Causes mild skin irritation. Causes eye irritation. Avoid contact with skin and eyes. May cause damage to organs through single exposure from inhalation. Do not eat, drink or smoke while using. Remove protective clothing immediately after handling this product and wash hands and face before meals and after work.

ECOTOXICITY

Very toxic to aquatic organisms. Do not apply directly into or onto water. No person may apply this substance in a manner that result in adverse effects to a water body. HSNO application restrictions apply: maximum application rate of 1 L/ha and a maximum of one application to the same area per year.

Very toxic to the soil environment. Certain plants may be damaged or killed from contact with this product. No person may apply the substance in a manner that results in adverse effects to non-target vegetation beyond the boundary of the subject property.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

HANDLING PRECAUTIONS

EQUIPMENT

Apply using accurately calibrated and maintained equipment in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Flush equipment thoroughly with clean water after use according to the Cleaning Spray Equipment instructions below. Dispose of the cleaning water according to the Disposal instructions below.

STORAGE

Store in the original container, tightly closed, away from foodstuffs and in a well ventilated place. Keep cool. Avoid contamination of seeds, fertilisers and other pesticides. Storage must be generally in accordance with the New Zealand Standard for the Management of Agrichemicals NZS8409.

Stores containing 100 L or more of Korvetto™ require bunding and are subject to signage. See the Hazardous Substances Emergency Management Regulations 35 – 41 and the New Zealand Standard for the Management of Agrichemicals (NZS8409) for further information.

PERSONAL PROTECTION

When opening the container, preparing the product for use or applying the product, wear eye protection, chemical resistant gloves, and cotton overalls buttoned to the neck and wrist (or equivalent).

SPILLAGE

DO NOT touch or walk through spilled material. Wear the protective equipment recommended above. Stop further spill occurring and prevent entry into waterways and drains. **Small spills/leaks:** Absorb with material

such as sand, soil or sawdust. Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal. **Large spills/leaks:** Dam the area off and report them to Corteva Agriscience Emergency Services at 0800 844 455.

DISPOSAL

Triple rinse empty container and add rinsate to spray tank. Triple rinsed containers containing the Agrecovery logo on the label and that are free of all residues (liquid and dry) and have intact legible label may be taken to an Agrecovery collection site. Otherwise crush or puncture and bury in a suitably approved landfill. **DO NOT** burn.

Dispose of the product only by using according to the label, via Agrecovery (visit www.agrecovery.co.nz or call 0800 AGRECOVERY (247 326) for information about the type and quantity of chemical acceptable for disposal.

Dispose of equipment cleaning water onto ground away from susceptible crops and plants.

DO NOT dispose of this product; spray mix or equipment cleaning water down drains or sewers.

FIRST AID

If swallowed do not induce vomiting. If medical advice is needed, have the product container or label at hand. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If splashed in eyes, flush out immediately with running water for at least 15 minutes. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

SAFETY DATA SHEET

A Safety Data Sheet is available from Corteva Agriscience on request. Call Customer Service Toll Free on 0800 803 939 or visit www.corteva.co.nz

TRANSPORT

DO NOT carry more than 1 L on a passenger service vehicle. Quantities of 1 L or less carried on a passenger service vehicle must be contained within sealed packaging.

NOTICE

Important: You **must** read the warning and conditions given on this label. If they are not acceptable, or if you are in doubt as to the proper handling of this product (including its transport, storage, use, disposal, and requirements for approved handlers [if applicable]) then return the unopened product to the supplier at once.

Warning: This product is subject to controls and could be hazardous if handled incorrectly. The **user is responsible** for ensuring that the handling of this product is in accordance with the law (including the *Hazardous Substances and new Organisms Act 1996* and the *Agricultural Compounds and Veterinary Medicines Act 1997*) and with the directions provided. The registrant declines all liability (whether in contract, tort (including but not limited to negligence), or otherwise) to the maximum extent permitted by law in relation to the handling of this product in a manner which is contrary to the directions given or to any applicable Acts, Regulations or Guidelines.

Further information regarding the applicable Acts, Regulations and Guidelines for the proper handling of this product may be obtained by contacting EPA New Zealand (www.epa.govt.nz) or the Ministry for Primary Industries (www.foodsafety.govt.nz).


This product is warranted to contain the specified active ingredients within accepted analytical tolerance when packed.

Registered pursuant to the ACVM Act 1997, No P9554.
See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to HSNO Act 1996, EPA Approval Code HSR101282
See www.epa.govt.nz for approval controls.

Registered to: Dow AgroSciences (NZ) Ltd* 89 Paritutu Road Private Bag 2017 New Plymouth 4342 Telephone 0800 803 939 www.corteva.co.nz	EMERGENCY RESPONSE (All hours) Ring from anywhere in New Zealand 0800 844 455, Or Globally +64 6 751 2407	IN A TRANSPORT EMERGENCY DIAL 111 FOR POLICE OR FIRE
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* Dow AgroSciences (NZ) Limited is a member of Corteva Agriscience group of companies.

Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLOPYRALID)
UN Number:	3082
Packing Group:	III
HAZCHEM:	• 2X
	

Date of Manufacture:

Batch No.

Barcode

DIRECTIONS FOR USE:

All spray applications should ensure complete coverage of the target weed.

MIXING

Pour the measured quantity of **Korvetto™** into a partially filled spray tank and add the remainder of the water. Agitate thoroughly during filling.

The use of a wetting agent or crop oil is NOT required when using Korvetto™.

PROTECTION OF THE ENVIRONMENT

DO NOT use on turf.

DO NOT allow the spray to drift onto susceptible crops.

Use under meteorological conditions or with spraying equipment that will minimise drift. See Application Method & Comments section.

DO NOT apply close to, or on, areas where treated soil or surface water may run off to areas containing, or are to be planted with, susceptible plants.

The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in the substance leaching into ground water. **DO NOT** apply when heavy rainfall is expected.

CLEANING OF SPRAY EQUIPMENT

Before using Korvetto™:

When spraying forage brassicas, equipment **MUST** be decontaminated **BEFORE** using **Korvetto™**, if herbicides such as MCPA, MCPB, 2,4-D and sulfonylurea compounds have been used at **ANY** time prior to **Korvetto™**. Small amounts of the above herbicides can severely affect brassica crops.

After using Korvetto™:

Small amounts of Korvetto™ will damage susceptible crops.

Rinsing

- Empty the tank completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose. Drain and clean any filters in the tank, pump, lines, hoses and nozzles.
- After cleaning the tank as above, quarter fill with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.
- Rinse water should be discharged onto a designated disposal area or onto wasteland away from susceptible plants and drains sewers and water courses.

Decontamination

Equipment MUST be decontaminated BEFORE and AFTER the application of Korvetto™.

Decontaminate using the following procedure:

- Quarter fill the tank and add a standard **alkali** based laundry detergent at 500 g (or mL)/100 L water and circulate throughout the system for at least 15 minutes. If using a concentrated laundry detergent use 250 g (or mL)/100 L water. **DO NOT** use chlorine based cleaners.
- Drain the whole system. Remove filters and nozzles and clean them separately.
- Finally flush the system with clean water and allow draining.

The effectiveness of decontamination should be checked by applying water from the decontaminated sprayer to sensitive plants such as beans or peas, and observing after 10 days for symptoms.

Note: decontamination procedures for herbicides such as MCPA, MCPB, 2,4-D & 2,4-DB are different to decontamination procedures for sulphonyl urea herbicides. Refer to the method provided on each herbicide label.

RAINFASTNESS

DO NOT apply if rain is likely within one hour.

RESIDUES IN SOIL AND PLANTBACK INTERVALS

The rate of decline of soil residues is dependent on several factors (including soil type and rainfall) and will vary from district to district. To promote herbicide decomposition, plant residues from treated crops should be evenly incorporated into the surface soil. Breakdown of residues in plants or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.

Following Crop	Plant back Intervals and Comments
Cereals, maize, annual or perennial ryegrass and forage brassicas	May be sown at any time following application to forage brassicas.
Clovers	DO NOT sow for at least 3 months after application. Deep ploughing to completely invert soil, followed by surface cultivation is recommended before sowing clover. Refer to Special Notes below.
Fodder beet	DO NOT sow for at least 6 months after application.
Other susceptible crops include, but are not limited to: flowers, some fruit trees, legumes (e.g. peas, beans, Lucerne), ornamentals, potatoes, shade trees, squash, tomatoes, vegetables, or vine crops.	DO NOT sow for at least 6 months after application. Deep ploughing to completely invert soil, followed by surface cultivation is recommended before sowing other susceptible crops. Refer to Special Notes below.
Special Notes: DO NOT apply Korvetto™ if it is necessary to sow these crops within the plant back intervals. Low rainfall conditions (less than 800 mm per year), low organic matter or heavy, poorly drained soil, will slow herbicide breakdown. This may necessitate delaying planting of clover until at least 6 months after	

application or until after a soil bioassay (see SOIL BIOASSAY below) has been conducted to confirm clover germination. **Planting of other susceptible crops may need to be delayed even further.**

If concerned about soil residues, DO NOT plant any susceptible broadleaf crops until the soil bioassay described below has demonstrated that it is safe. Alternatively, sow a small area first to check soil residues.

SOIL BIOASSAY

A simple bioassay involves collecting at least 10 spade spits of soil to a depth of 200 mm from around the paddock and thoroughly mixing the soil together. Place some of this soil in a suitable shallow container to a depth of 3-5 cm and sow 100 seeds of the susceptible crop into the soil. (Subterranean or white clover are good indicator plants where it is not practical to use the susceptible crop). Keep in a warm situation with good light and ensure the soil does not dry out. After crop emergence, check the number of plants that have germinated and seedling vigour. Symptoms of **Korvetto™** residues include low or non-germination and emergence, leaf cupping, leaf yellowing, stem elongation and twisting. If these symptoms occur – **DO NOT** plant the susceptible crop. Repeat the bioassay again after a further time interval.

Management of Spray Drift:

DO NOT apply when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site.

Spraying equipment must be calibrated to deliver coarse or larger droplets as defined by the American Society of Agricultural and Biological Engineers ASABE Standard (S572) or the British Crop Production Council guideline.

MANDATORY DOWNWIND BUFFER ZONES

For the protection of aquatic organisms the following buffer zones **MUST BE** observed from DOWNWIND water bodies:

- ≥ 10 metres for ground applications
- ≥ 10 metres for aerial applications

ADVISORY DOWNWIND BUFFER ZONES

For the protection of non-target plants the following buffer zones are recommended from any DOWNWIND natural or planted vegetation:

- ≥ 10 metres for ground applications
- ≥ 75 metres for aerial applications

Due to local conditions the recommended downwind buffer zones may not provide adequate protection in some circumstances. Persons applying the substance must take into account site-specific conditions at the application site on the day of application and amend the size of the buffer zone as required.

Important: In order to select the appropriate nozzles for the required spray quality and to operate the equipment to minimize spray drift, this product must be applied in accordance with the New Zealand Standard for the management of Agrichemicals (NZS8409). Avoid strong winds or inversion conditions that may result in drift from the target area. Techniques to minimise drift should be employed at all times.

MAXIMUM RESIDUE LIMITS

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 PERIODS (WHP)

Forage brassicas

DO NOT graze or cut for animal feed for 14 days after application. After this period, animals may graze forage brassicas and be sent for slaughter or used for milk production.

COMPOST

Korvetto™ must not be used for the treatment of forage brassicas where these will be used for making compost; or where the crops will be made available for collection for, or deposited at, a municipal green waste recycling depot.

BROADCAST APPLICATION – FORAGE BRASSICAS

- **Korvetto™** should be applied to actively growing forage brassicas at the 3-4 leaf stage. See **Crop Selectivity** below.
- Apply to small, actively growing, seedling weeds as soon as possible after weed emergence is largely complete. See **WEEDS CONTROLLED** below.

IMPORTANT See Decontamination of Application Equipment, Withholding Periods, Application Methods and Comments, Residues In Soil and Plant back Intervals sections of the label before all application to forage brassicas.		
WEEDS CONTROLLED	RATE	COMMENTS
Black nightshade (up to 8 leaf) Fathen (up to 8 leaf) Fumitory (up to vegetative rosettes) Hairy nightshade (up to 8 leaf) Shepherds purse (up to 4 leaf)	1.0 L/ha	Weeds at later growth stages will be suppressed. Californian thistle, and other thistles, will be suppressed. Addition of Versatill PowerFlo (50 – 300 mL/ha) to Korvetto™ will increase thistle control. Good crop growth will increase competition and weed control.

APPLICATION METHODS & COMMENTS – FORAGE BRASSICAS

Water Rates and Spray Quality:

Ground broadcast application: apply **Korvetto™** in 100 - 200 litres of water per hectare as a coarse quality spray as defined by the British Crop Protection Council (BCPC) Guidelines or the American Society of Agricultural and Biological Engineers Standard (ASABE - S572).

Use of higher water rates generally improves coverage and weed control – especially where weeds are dense.

Aerial application: apply **Korvetto™** in 60-100 litres of water per hectare as a coarse quality spray as defined by BCPC and ASABE - S572.

CDA application: use the large (250-300 micron) droplet size and apply not less than 30 litres of water per hectare.

IMPORTANT: Select the appropriate nozzles for the required spray quality and operate the equipment to minimize spray drift. **Korvetto™** must be applied in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Compatibility:

Korvetto™ is compatible with most insecticides and grass weed herbicides recommended for use in forage brassicas.

Application of spraying oils, required for grassweed herbicides, in tank mixes with **Korvetto™** may slightly increase broadleaf weed control but may decrease crop selectivity. (See Crop Selectivity below).

Consult your www.corteva.co.nz representative for more information.

Crop Selectivity:

Some transient cupping of leaves and height reduction may occur after application to some forage brassica varieties.

Typically yield is not affected when good growing conditions occur before and after application.

DO NOT apply **Korvetto™**:

To forage brassicas less than the 3 leaf stage,

If forage brassicas are stressed at application or if stress is probable after application. Stress factors include low soil moisture, extreme temperatures, nutritional deficiencies or high pest and disease pressure.

Test Korvetto™ on small areas of newly released forage brassica varieties and cultivars until experience has shown that application is safe.

DO NOT apply to Raphanobrassicac.

Pre-emergence herbicides: **Korvetto™** can be used following pre-emergent applications of trifluralin herbicide. Application of some other herbicides prior to **Korvetto™** may result in injury to forage brassicas and suppression of yield. Consult with www.corteva.co.nz prior to application of other (pre or post-emergent) herbicides if **Korvetto™** is to be applied to forage brassicas.

Crop Competition: Crop competition will increase control of weeds only moderately susceptible to **Korvetto™**. Crop competition is increased by ensuring ideal pH and fertility is achieved prior to planting, and that seed is sown at appropriate rate and depth into a fine, moist seedbed.

RESISTANCE MANAGEMENT

GROUP	O3	O4	HERBICIDE
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Korvetto™ is a mixture of two Group O herbicides. Halauxifen-methyl, a Group O3 aryl picolinate and clopyralid, a Group O4 pyridine carboxylic acid. Some naturally occurring individual weeds may become resistant when excessive use of the same herbicide occurs. To maximize the effectiveness of herbicides, products containing alternate modes of action should be used in the overall spray program. Consult <http://resistance.nzpps.org/> for alternate modes of action and the details of resistance management strategies (if any) for the crops listed on the label.

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