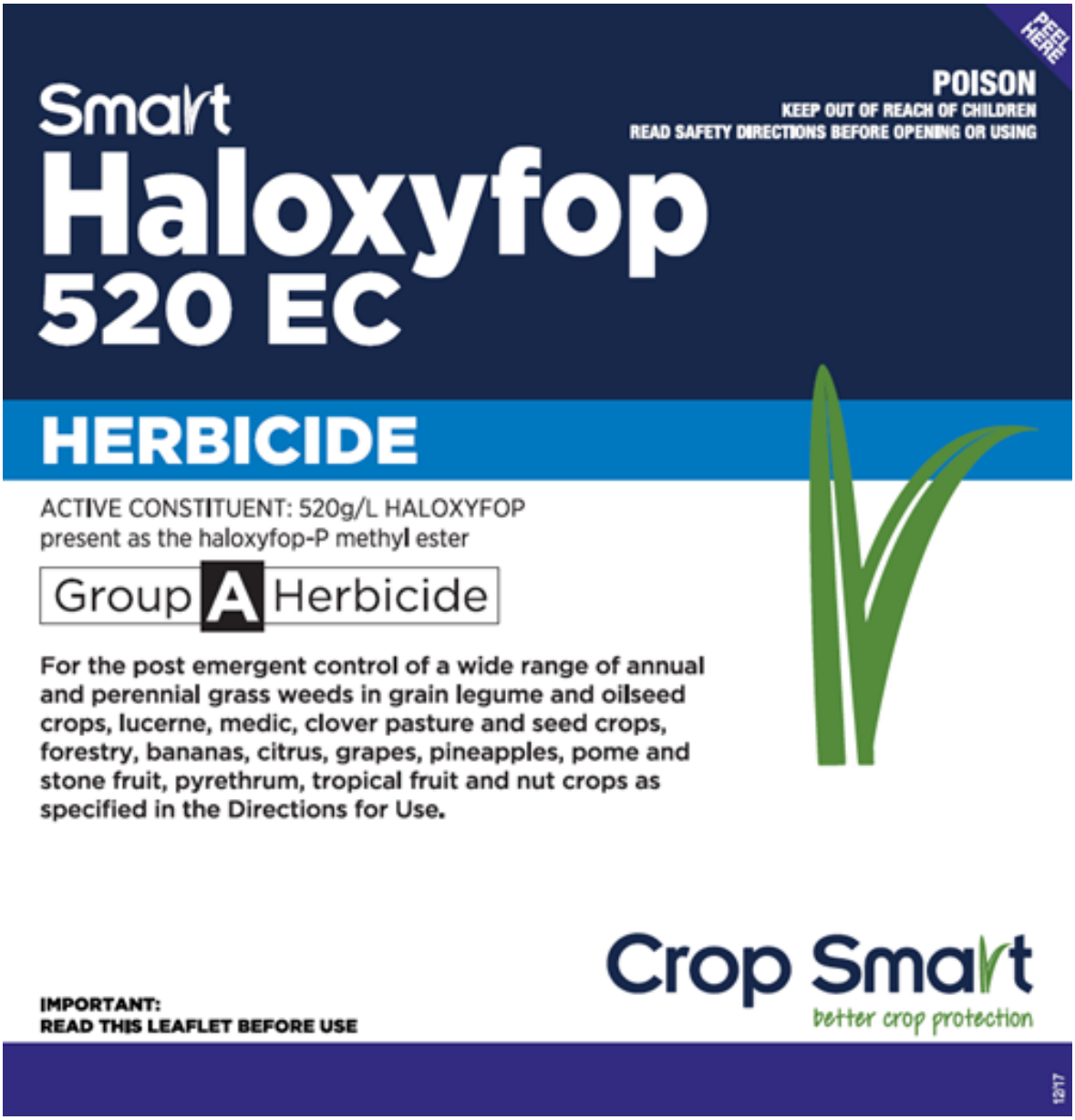

APVMA Approval No: 64587/48714

Contents: 5L, 10L, 20L, 110L

Crop Smart Pty Ltd
ABN: 28 093 927 961
2409/4 Daydream Street,
Warriewood, NSW 2102

RESTRAINTS:

DO NOT apply to weeds which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (waterlogged or drought affected), poor nutrition or previous herbicide treatment as reduced levels of control may result.

DO NOT spray if rain is likely to occur within one hour.

Table 1a. Winter crops - Canola, Chickpeas, Faba beans, Field peas, Lentils, Linola, Linseed, Lupins, Lucerne, Vetch, Medic and Clover pastures or seed crops:

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha)		CRITICAL COMMENTS
		With Uptake*1 Spraying Oil	With a non-ionic wetter 2	
Annual ryegrass	2 to 4 leaf	75	100	**CANOLA, LINOLA & LINSEED** DO NOT apply after the 8 leaf stage of the crop DO NOT apply after the commencement of stem elongation. This means that application must not occur after the 8 leaf stage, or if stem elongation commences before the 8 leaf stage, application must not occur after stem elongation has commenced. DO NOT apply more than 1 application of herbicide containing haloxyfop per crop. DO NOT apply after grazing.
	Early Tillering	100	100	
Barley grass Brome grass Paradoxa grass Volunteer cereals	2 to 4 leaf	50	75	
	Early Tillering	75	100	
Wild oats WA, SA, Vic, Tas, Southern and Central NSW	2 to 4 leaf	37.5	50	[1,2] **See GENERAL INSTRUCTIONS, Spraying oils/wetters section.** **FIELD PEAS AND CANOLA:** The only oil recommended for use with Smart Haloxyfop 520 EC Herbicide is Uptake* Spraying Oil.
	Early Tillering	50	75	
Wild oats Northern NSW & Qld	2 to 4 leaf	50	75	**LUPINS AND FIELD PEAS:** Mixtures with Broda!* or simazine may cause crop yellowing and separate applications are recommended. **CHICKPEAS, FABA BEANS, LENTILS AND VETCH, LINOLA, LINSEED:** Broadleaf herbicides should not be added to Smart Haloxyfop 520 EC Herbicide. For ***chickpea, faba beans, lentils and vetch,*** apply Smart Haloxyfop 520 EC Herbicide and broadleaf herbicides at least a week apart. **LUCERNE, CLOVER OR MEDIC PASTURES:** If grazed or cut for hay immediately prior to treatment, delay application until all grasses have fully expanded leaves. Use 75 ml+ spraying oil or 100 ml+ wetter/ha. (See GENERAL INSTRUCTIONS, Spraying Oils/wetters section). If silver grass (*Vulpia spp.)* is present in pasture, simazine should be tank mixed with the higher rate of Smart Haloxyfop 520 EC Herbicide plus a non-ionic wetter.
	Early Tillering	75	100	

Table 1b. Winter crop growth stage application windows

Crop	Crop Growth Stage
Lucerne, Medic and Clover pastures or Seed crops	Apply from 2nd trifoliate leaf onwards. For *Erodium spp.* spraying, apply from cotyledon crop stage onwards.
Canola, Linola and Linseed	Apply from 2 leaf to 8 leaf stage of crop growth. DO NOT apply after the commencement of stem elongation This means that application must not occur after the 8 leaf stage, or if stem elongation commences before the 8 leaf stage, application must not occur after stem elongation has commenced.
Chickpeas, Faba beans, Field peas, Lentils, Lupins. Vetch	Apply from 2nd leaf, 2nd node or 2nd branch to prior to flowering

Table 2a. Lucerne, Medic and Clover seed crops and pastures. See table 1b for crop stages

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake [1] Spraying oil	CRITICAL COMMENTS
Prairie grass *(Bromus catharticus)*	Up to early tillering	100	[1] **See GENERAL INSTRUCTIONS, Spraying oils/wetters section.**
Musky or ferny leaf Storksbill: *(Erodium moschatum)* Common Crowsfoot or Common Storksbill *(Erodium cicutarium)*	Up to 6 leaf or 5 cm diameter	50 - 75[3]	[3] Use lower rate when growing conditions and crop or pasture competition are good and when weed populations are below 100 plants/m^2. Use the higher rate when weed populations are above 100 plants/m^2 or when crop or pasture competition is poor.
Long or shiny leaf storksbill (E. *botrys)*	Up to 8 leaf or 5 cm diameter	75 - 100	**NOTE:** Storksbill may not be controlled if **simazine or Broadstrike*** are tank-mixed with Smart Haloxyfop 520 EC Herbicide. **LUCERNE, CLOVER OR MEDIC PASTURES:** If grazed or cut for hay immediately prior to Treatment delay application until all grasses have fully expanded leaves. Use 75 ml + spraying oil or 100 ml+ wetter/ha. (See **GENERAL INSTRUCTIONS**, Spraying Oils/wetters section). If silver grass *(Vulpia* spp.) is present in pasture, simazine should be tank mixed with the higher rate of Smart Haloxyfop 520 EC Herbicide plus a non-ionic wetter.

Table 2b. Lucerne, Medic and Clover seed crops – not to be used for stockfeed. See table 1b for crop stages

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake ™ Spraying oil	CRITICAL COMMENTS
Couch grass (suppression), Rhodes grass (control)	Tillering seedlings	150 + 150 [4]	[4] For best suppression of couch or Control of Rhodes grass, make 2 applications of Smart Haloxyfop 520 EC Herbicide 2-4 weeks apart. Time second application to coincide with tillering stage of weeds and just after irrigation or significant rain.
Couch grass (control) Rhodes grass (control)	Established stands	400 800	Only treat actively growing weeds which are not moisture stressed. Use these rates for control of couch and Rhodes grass

Table 3a. Summer crops – Cotton, Cowpea, Lucerne, Mung beans, Navy beans, Peanuts, Soybeans, Sunflowers.

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake ™ Spraying oil	CRITICAL COMMENTS
Australian millet	2 leaf to tillering up to 15cm	150	**See GENERAL INSTRUCTIONS, Spraying oils/wetters section.** **<u>NAVY BEANS, PEANUTS, SOYBEANS:</u>** For broadleaf weed control, Smart Haloxyfop 520 EC Herbicide at 150mL/ha plus wetter may be tank mixed with Blazer* (except on navy beans) or Basagran*. Tank mixtures may cause transient leaf spotting on the crop but do not normally affect yield **DO NOT** tank mix broadleaf herbicides with Smart Haloxyfop 520 EC Herbicide if grasses have begun tillering or if the grasses are under moisture stress. **DO NOT** add Uptake* Spraying Oil when mixing with Blazer* or Basagran*. **DO NOT** use Blazer* or Basagran* tank-mixes on cowpea.
Barnyard grass	2 to 5 leaf	100	
	Tillering up to 15cm	150	
Crowsfoot grass Green panic Johnson grass (rhizome)	2 leaf to tillering up to 15cm	150	
Johnson grass (seedling) Liverseed grass (seedling) Mossman river grass	2 to 5 leaf	100	
	Tillering up to 15cm	150	
Summer grass	2 leaf to tillering up to 15 cm	150	
Volunteer cereals	2 to 4 leaf	100	
	Tillering up to 15cm	150	

Table 3b. Summer crop growth stage application windows

Crop	Crop Growth Stage
Lucerne	Apply from the 2nd trifoliate leaf onwards
Cowpea, Mung beans, Navy beans, Soybeans	Apply from the 2nd leaf to flowering
Peanuts	Apply from 5cm to pegging
Cotton	Apply from 2nd leaf to before the onset of flowering
Sunflowers	Apply from 2nd leaf to head initiation

Table 4. Annual and Perennial grasses and *Erodium spp*. In Orchard, Vine and Plantation crops, forestry, and pyrethrum.

CROPS	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha) with Uptake[1] Spraying Oil	CRITICAL COMMENTS
Orchard, vine and plantation Crops including: Apples Avocado Banana Blueberry Citrus Custard apple Feijoa Grapevines Guava Kiwifruit Litchi (Lychee) Longan Mango Nashi Nut trees Passionfruit Paw paw Pear Persimmon Pineapple Rambutan Stonefruit	All growth stages	***Perennial grasses:*** Couch Rhodes grass Slender rats tail grass	Established stands	400 - 800	[1] **See GENERAL INSTRUCTIONS, Spraying oils/wetters section.** Spray should be directed to the base of the tree or vine avoiding contact with fruit and foliage.
		Buffel grass Green panic Johnson grass Kikuyu *Paspalum spp* *Setaria spp*	Vegetative to early tillering	200	**Spot spray:** Use 25 ml to 50 mL/100 L of water. Use higher rate on late tillering mature grasses.
			Late Tillering	400	**Annual Grasses:** Where treated in association with perennial grasses, these annual grasses will be controlled.
		Annual grasses Annual ryegrass Barley grass Barnyard grass Brome grass Crowsfoot grass Lesser canary grass Liverseed grass Mossman river grass Paradoxa grass Summer grass Volunteer cereals Wild oats	2 leaf to tillering	200	
Forestry: Pinus *radiata* *Eucalyptus* spp.					
Forestry: *Pinus pineaster*		***Annual grasses:*** as above	Vegetative to tillering	125 - 250	Forestry: For annual grasses apply lowest rate to newly emerged grasses, increasing the rate as they develop.
Pyrethrum		Barley grass Brome grass Rope twitch Barnyard grass *Erodium* spp. Volunteer cereals	Vegetative to tillering	100 – 250	**Pyrethrum Tasmania only:** For *Erodium spp* apply 75-100mL/ha if the main weed is *E. botrys.* Use 50 - 75 ml/ha if either *E. cicutarium* or *E. moschatum* are the main weeds.

Table 5. Smart Haloxyfop 520 EC and Select ®Herbicide tank – mixes – Canola, Chickpeas, Faba beans, Field peas, Lupins & Lentils.

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (mL/ha)		CRITICAL COMMENTS
		Smart Haloxyfop	Select Herbicide	
FOP/DIM susceptible Annual ryegrass + Volunteer barley Volunteer wheat Brome grass Wild oats Barley grass Phalaris	2 to 4 leaf	25	150	[1]**See GENERAL INSTRUCTIONS, Spraying oils/wetters section.** Use Uptake Spraying Oil at 500mL/100L or Hasten® at 1L/100L. Apply at the same crop growth stages as those in Table 1b Winter Crops **Lentils:** Apply up to 7 node-early branching crop growth stage only. **Lupins:** Not for Old.
	Early Tillering	38	150	
FOP resistant Annual ryegrass + Volunteer barley Volunteer wheat Brome grass Wild oats Barley grass Phalaris	2 to 4 leaf	25	200	
	Early Tillering	38	250	

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

WITHOLDING PERIODS

HARVESTING WITHHOLDING PERIODS

NOT REQUIRED WHEN USED AS DIRECTED FOR:

Canola, Chickpeas, Cotton, Cowpea, Faba Beans, Field Peas, Lentils, Linola, Linseed, Lupins, Mung Beans, Navy Beans, Orchard crops, Peanuts, Plantation crops, Soybeans, Sunflowers, Vetch or Vine crops.

DO NOT HARVEST FOR:

Medic and clover seed crops: **7 DAYS AFTER APPLICATION**

STOCK FOOD WITHHOLDING PERIODS:

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR:

Canola, chickpeas, cotton, cowpea, Faba beans, field peas, lentils, linola, linseed, lupins, mung beans, navy beans, peanuts, soybeans, sunflowers and vetch: **28 DAYS AFTER APPLICATION**

Lucerne: **21 DAYS AFTER APPLICATION**

Medic and clover pasture: **7 DAYS AFTER APPLICATION**

COTTON GIN TRASH MUST NOT BE FED TO ANIMALS.

GENERAL INSTRUCTIONS

MIXING

- Add water to the spray tank to 10 cm above the level of agitation and ensure the agitation device is working vigorously. (There must be a minimum of 100 L of water in the tank before any pesticide is added.)
- If tank mixing, firstly, add any soluble liquid formulations (e.g. Lontrel* Herbicide) and allow agitation for approximately one minute.

Then add Smart Haloxvfop 520 EC Herbicide at the point where agitation is strongest. **(Do not add Smart Haloxyfop 520 EC Herbicide through a strainer or sieve).** Allow further agitation for one minute.

- Half fill the spray tank.
- If using wettable powder or water dispersible granules, or other emulsifiable concentration formulations (e.g. Lorsban* 750 WG or omethoate) these should be **added after the Smart Haloxyfop 520 EC Herbicide** to the half full spray tank ensuring vigorous agitation.
- Finally add Uptake* Spraying Oil or approved alternate spraying oil/wetter. (See *section on spraying oils/wetters)* and continue filling the tank to the required volume maintaining agitation at all times.
- Only mix sufficient solution for immediate use. Smart Haloxyfop 520 EC Herbicide and any other tank mixes should be applied immediately for best results.

- **SPRAYING OILS/WETTERS**

1 **Spraying Oils:** It is essential to add an adjuvant to Smart Haloxyfop 520 EC Herbicide. Best results will be achieved with Uptake* Spraying Oil at 0.5 L/100 L of spray solution. Alternatively, other oils plus a non-ionic wetter may also be used.
When other crop spraying oils are used, mix at 1 L/100 L and *add a non-ionic wetter (surfactant) at 200 mL /100 L* of spray solution. **Use of an oil is not always recommended.** See CRITICAL COMMENTS for specific situation recommendations.

2 **Non-ionic Wetters:** When Uptake or other oils are not used, a 100% concentrate non-ionic wetting agent such as BS-1000® at 200 mL/100 L must be used along with the higher rate of Smart Haloxyfop 520 EC Herbicide as specified in the DIRECTIONS FORUSE.

Where water volumes of less than 50 L/ha are used, **DO NOT** use less than
250 mL/ha of Uptake or 500 mL/ha for oils other than Uptake or less than 100 ml/ha of wetter.

Canola, lucerne, medic and clover pastures and seed crops:

When tank mixing Smart Haloxyfop 520 EC Herbicide with Clopyralid herbicides (canola only) or Broadstrike™ (lucerne, clover and medics), use Uptake* Spraying Oil with the lower rates of Smart Haloxyfop 520 EC Herbicide or a wetting agent with the higher rates of Smart Haloxyfop 520 EC Herbicide unless otherwise specified. When mixing Smart Haloxyfop 520 EC Herbicide with other broadleaf herbicides on these crops, **DO NOT** use an oil use a wetter instead.

Field peas and canola:

The oil recommended is Uptake* Spraying Oil. Hasten* is also recommended for use with tank-mixtures of Smart Haloxyfop 520 EC Herbicide and Select Herbicide TM.

For canola, Smart Haloxyfop 520 EC Herbicide + Lontrel* 750 SG + Uptake* Spraying Oil are compatible and selective to canola. This tank-mixture is also compatible with atrazine or simazine and selective to triazine tolerant canola.

Navy Beans, Peanuts, Soybeans:
When mixing with Blazer* or Basagran* DO NOT add spraying oil to these mixtures.
DO NOT use these tank-mixes on cowpea.

COMPATABILITY:
Ground use only: Smart Haloxyfop 520 EC Herbicide can be mixed with:

Insecticides:	dimethoate
	chlorpyrifos
	omethoate
Herbicides:	atrazine
	Basagran*
	Blazer*
	Broadstrike* Herbicide
	Lontrel*750 SG
	MCPA ester (LVE) - **DO NOT** exceed 700mL/ha of MCPA LVE
	Oryzalin
	Grasidim® Herbicide
	Simazine
	Acclaim® herbicide
Fungicides:	Dithane DF*, Dithane Rainshield
Trace elements:	magnesium sulphate
	Zinc sulphate

Smart Haloxyfop 520 EC Herbicide is NOT COMPATIBLE with 2,4-D or MCPA as sodium or amine salts.

Aerial use: No product other than a recommended crop oil or wetter should be mixed with Smart Haloxyfop 520 EC Herbicide when applied by air except for addition of Lontrel* Forestry Herbicide for use in forestry and Lontrel 750 SG for use in canola only.

APPLICATION
Apply Smart Haloxyfop 520 EC Herbicide is sufficient water to obtain good coverage. It should be applied by an accurately calibrated ground rig or aircraft delivering droplets with a VMD of 200 - 300 microns.

The following spray volumes are recommended.

Ground application	50-150 L/ha
Aerial application	30 L/ha minimum

Use higher water volumes in orchards and in dense crops where the weeds may be shielded by the crop canopy.

CLEANING SPRAY EQUIPMENT
If broadleaf herbicides, particularly sulfonylureas, have been used in spray equipment at any time prior to Smart Haloxyfop 520 EC Herbicide, particular care should be taken to follow the directions on the relevant broadleaf herbicide label for equipment cleaning, or damage to susceptible crops may occur.

After using Smart Haloxyfop 520 EC Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean any filters in the tank, pump, line and nozzles.

To rinse. After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

To decontaminate. Before spraying cereals, maize, sorghum or other sensitive crops, wash the tanks and rinse the system as above. Then quarter fill the tank and add an alkali detergent (eg. SURF®, OMO®, Cold Water SURF Concentrate, DynamoMatic Concentrate, or DRIVE®) at 500 mL/100 L of water or the powder equivalent at 500 g/100L of water, and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain. Chlorine based cleaners are not recommended.

Rinse water should be discharged onto a designated disposal area, or if this is unavailable, onto unused land away from the desirable plants and water sources.

RESISTANT WEEDS WARNING

GROUP	**A**	**HERBICIDE**

Smart Haloxyfop 520 EC Herbicide is a member of the aryloxyphenoxy propionate group of herbicides. Smart Haloxyfop 520 EC Herbicide has the acetyl CoA carboxylase) inhibitors mode of action. For weed resistance management Smart Haloxyfop 520 EC Herbicide is a Group A herbicide. Some naturally-occurring weed biotypes resistant to Smart Haloxyfop 520 EC Herbicide and other Group A herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by Smart Haloxyfop 520 EC Herbicide or other inhibitors of acetyl CoA carboxylase. Since the occurrence of resistant weeds is difficult to detect prior to use, Crop Smart Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds. Strategies to minimize the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or Crop Smart representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS
Smart Haloxyfop 520 EC Herbicide damages cereals and grasses.
DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

Cereal crops or grasses planted within twelve weeks of application may be damaged by the residual effects of Smart Haloxyfop 520 EC Herbicide, particularly on light and red soils.

PROTECTION OF LIVESTOCK
DO NOT graze or cut treated crops for stock food except as specified under withholding periods.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
Smart Haloxyfop 520 EC Herbicide is toxic to fish.
DO NOT contaminate streams, rivers or waterways with the chemical or used container.

STORAGE AND DISPOSAL
Store in the closed original container in a cool, well-ventilated area.
DO NOT store for prolonged periods in direct sunlight.

DO NOT store near foodstuffs, fertilisers or seeds.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. **DO NOT** dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Refillable containers (100L, 500L and 1000L): Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SMALL SPILL MANAGEMENT
Wear protective equipment (see SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, cat litter or clay granules to the spill. When absorption is complete, sweep up material and contain in a refuse vessel for disposal (see STORAGE AND DISPOSAL). If necessary was the spill area with an alkali detergent and water and absorb this wash liquid for disposal as described above.

SAFETY DIRECTIONS
Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with the eyes and skin. When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.

After each day's use, wash gloves, face shields or goggles and contaminated clothing. Wash hands after use.

FIRST AID
If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia: 13 11 26. If in eyes open, flood with water for at least 15 minutes and see a doctor.

MATERIAL SAFETY DATA SHEET
Additional information is listed on the Material Safety Data Sheet which can be obtained from the supplier.