



CAUTION
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

eChem
STAROXY 200

HERBICIDE

ACTIVE CONSTITUENT: 200 g/L FLUROXYPYR present as the methyleheptyl ester
SOLVENT: 596 g/L LIQUID HYDROCARBON

GROUP  **HERBICIDE**

For the control of a wide range of Broadleaf Weeds in Fallow, Lucerne, Maize, Millets, Pastures, Poppies, Sorghum, Sugar Cane, Sweetcorn, Winter Cereals. Also for the control of Woody Weeds in Agricultural Non-Crop Areas, Commercial and Industrial Areas, Forests, Pastures and Rights-of-way, as specified in the Directions for Use. IMPORTANT: READ THIS BOOKLET BEFORE USING THIS PRODUCT

APVMA Approval Number: 61136/62525

eChem (Australia) Pty Ltd
(ABN 089 133 095)

Level 4, Lantos Place 80 Stamford Road
Indooroopilly QLD 4068
Ph: 1300 781 649 Fax: 1300 781 650

DIRECTIONS FOR USE:

RESTRAINTS:

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

Thorough coverage of both foliage and stems, to the point of runoff, is essential for high volume applications (see GENERAL INSTRUCTIONS; application methods WOODY WEED SITUATIONS section).

DO NOT spray if rain is likely within one hour.

Table 1 Woody Weeds in Agricultural Non-Crop Areas and Rights-of-way, Commercial and Industrial Areas, Forests and Pastures.

Table 2 Established Grass Pastures (Ground and Aerial).

Table 3 Sorghum, Maize, Millets and Sweet corn.

Table 4 Winter Cereals (Wheat, Barley, Oats and Triticale).

Table 5 Summer Fallow.

Table 6 Winter Fallow.

Table 7 Sugarcane.

Table 8 Lucerne (established only).

Table 9 Poppies.

Table 1: Woody Weeds in Agricultural non-crop areas and Rights-of-way, Commercial and Industrial areas, Forests and Pastures.

Legumes present at the time of spraying will be severely damaged.

HIGH VOLUME APPLICATION: Dilute product with water				
See General Instructions Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE mL/100 L of water	CRITICAL COMMENTS
Bathurst burr, Noogoora burr.	Seedlings and young plants up, to 40 cm high.	NSW, NT, Qld, WA only	75	
Black bindweed (Climbing buckwheat).	Seedlings and young plants before flowering.	NSW, Qld only	300	
<i>Mimosa pigra</i>	Apply from mid to late summer	NT, WA only	300	Add Uptake* Spraying Oil (see GENERAL INSTRUCTIONS; oils and surfactants).
Common sensitive plant.	Seedlings and young plants up to flowering.	Qld, WA only	500	
Bellyache bush.		Qld, NSW, WA only		
Blackberry nightshade Bokhara clover.		NSW, Qld only		
Caltrop (yellow vine) (<i>Tribulus terrestris</i>), (<i>T. micrococcus</i>).	Seedlings and young plants up to 30 cm diameter.			
Cobblers pegs.	Up to 15 cm high.			
Cockspur thorn	Up to 3 m high.			
Creeping lantana.	At flowering.	NSW, Qld only	500	Add Uptake* Spraying Oil (see GENERAL INSTRUCTIONS; oils and surfactants).
Crofton weed, Mistflower.	Seedlings and young plants up to flowering.			
Docks (<i>Rumex</i> spp.).	Seedlings and rosettes up to 30 cm high.			
Hexham scent.	Seedlings and young plants up to flowering.			Boom spray: Staroxy 200 at 300 mL + 500 mL of 2,4-D Amine (500 g/L).
Honey locust.	Seedlings and young plants up 2 m high. to 2m high			
Small flowered mallow (Marshmallow) (<i>Malva parviflora</i>).	Seedlings and young plants up to flowering.			
Yellowflower, Devil's claw.	Seedlings and young plants up to flowering.	NSW, Qld only	500	Apply to actively growing plants from October to April.
Lantana	Seedlings and regrowth 0.5 to 1.2 m high. Plants and regrowth 1.2 to 2 m high.		1000	Some regrowth may occur particularly when treating old woody plants with sparse canopies.
Blue heliotrope	Flowering.			
Limebush	Infestations up to 1.5 m high only.			
Madeira vine	Apply at time of active growth.		500	
Milkweed (<i>Euphorbia heterophylla</i>)	3 leaf to flowering.	Qld only	1000	Repeat applications will be necessary to control subsequent germinations.
Common sowthistle	Seedlings and young plants up to bolting.	NSW, Qld only	500	Add a surfactant (See GENERAL INSTRUCTIONS; Oils and surfactants).
Mother-of-millions (<i>Kalanchoe</i> spp.)	Seedling and young plants before flowering.		600	
Prickly acacia	Seedlings and young plants up to 2 m high.	Qld only	750	Add Uptake* Spraying Oil (see GENERAL INSTRUCTIONS; Oils and surfactants). Consult Tropical Weeds Research Centre, Charters Towers, for specific advice on application.
<i>Sida</i> spp	Seedlings and young plants up to flowering.	NSW, NT, Qld, WA only	1000	
Broadleaf Pepper tree (<i>Schinus terebinthifolius</i>)	Mature leaves, fruiting.	Qld only	500	Winter application only. Contact Alan Fletcher Research Station for more information.
Flannel weed (<i>Sida cordifolia</i>)				
Snakeweed, (Dark and light blue).	Seedlings and young plants before flowering.		750	Add Uptake* Spraying Oil (See GENERAL INSTRUCTIONS; Oils and surfactants).
Stinking Passion Flower	Established plants and regrowth.	Qld, NT, WA only	450	Use 70 mL/15 L for a knapsack.
Wandering jew (<i>Tradescantia albiflora</i>)	Young plants up to and including flowering.	All States	1500	Some regrowth will usually occur and will require retreatment.
Wattles (including <i>Acacia aulacocarpa</i> , <i>A. decora</i> , <i>A. harpophylla</i> , <i>A. leiocalyx</i> , <i>A. salicina</i>)	Seedling plants or regrowth 0.5 to 1.2 m high. Plants or regrowth 1.2 to 2 m high only.	NSW, Qld only	500	Apply to actively growing plants when soil moisture is plentiful. Some regrowth may occur particularly when treating old woody plants with sparse canopies and under dry conditions.
			1000	

STORAGE AND DISPOSAL

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

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 authority landfill. If no landfill is available, bury the containers below 500 mm 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.

SMALL SPILL MANAGEMENT

Wear protective equipment (See SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, clay granules or cat litter to the spill. Sweep up material for disposal when absorption is completed and contain in a refuse vessel for disposal (See STORAGE AND DISPOSAL section). If necessary, wash the spill area with an alkali detergent and water and absorb as above the wash liquid for disposal.

SAFETY DIRECTIONS

Avoid contact with 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, a face shield or goggles. Wash hands after use. After each day's use wash gloves, face shield or goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed, DO NOT induce vomiting. Give a glass of water.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet.

CONDITIONS OF SALE

eChem (Australia) Pty Ltd. Accepts responsibility for the consistent quality of the product however since the use and application of the product is beyond control, the company accepts no responsibility whatsoever for any loss, damage or other result following the use of the product whether used in accordance with directions or not; other than those mandatorily imposed by statutes, the liability is limited to the replacement of the goods and is conditional upon a claim made in writing and, where necessary, a sufficient part of the goods being returned for proper examination by the company within thirty days of sale.

* Other registered trademarks

BASAL BARK AND CUT STUMP APPLICATION: Dilute product with diesel

See General Instructions - Application Method for application details

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE mL/100L of diesel	CRITICAL COMMENTS
Celtis (<i>Celtis sinensis</i>)	Basal Bark only: Young plants up to 2 m high and 20 cm basal diameter.	Qld only	3,5	Treat stems from ground level to where multi-stemmed trunks branch.
Chinee apple	Up to 15 cm basal diameter.		3	With basal bark, treat circumference of stem to height of 45cm from the ground.
Cockspur thorn	Basal Bark only: Up to 5 cm basal diameter.		2	Contact The Land Protection Branch, Department of Natural Resources and Mines, Qld for further information on Chinee Apple.
Mimosa bush (<i>Acacia farnesiana</i>)	Up to 5 cm basal diameter.	Qld, WA only	3	
Prickly acacia	Up to 10 cm basal diameter.	Qld only	1,5	
Honey locust	Plants up to 10 cm basal diameter. Plants 10 to 20 cm basal diameter. Plants > 20 cm basal diameter.	Qld, NSW only	1,5 3 5	With basal bark, treat circumference of stem to height of 45 cm from the ground For cut stump application use a rate of 5 L/100 L diesel for all plant sizes. Contact The Land Protection Branch, Department of Natural Resources and Mines, Qld for further information on Honey Locust.
Sisal hemp (<i>Agave</i> spp.)	All growth stages.	Qld only	3	Treat as an overall spray. Contact The Land Protection Branch, Department of Natural Resources and Mines, Qld for advice to control large infestations.
			10 mL undiluted product per plant.	Lever out centre of plant with crowbar and immediately treat the exposed cut area.

BROADCAST AND AERIAL APPLICATION: Dilute product with water

See General Instructions - Application Method for application details

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Mimosa pigra	Actively growing plants.	NT, WA only	3 L	Aerial application: Add Uptake* Spraying Oil at the rate of 1 L/100 L spray mix. Apply to actively growing plants from mid to late summer. Contact The Department of Primary Industries and Fisheries, NT for further information.

LOW VOLUME, HIGH CONCENTRATE APPLICATION: Using a drench gun or gas-powered gun

See General Instructions - Application Method for application details

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/10 L of water	CRITICAL COMMENTS
Limebush	Isolated bushes up to 1.2 m high only.	NSW, Qld only	1	Apply a 50 mL dose per 5 m ² of bush surface area.
Tree violet (<i>Hymenanthera dentata</i>)	Apply from late flowering to green fruit up to 1.2 m high.	NSW only		Apply a 50 mL dose per cubic metre of bush.

Table 2: Established Grass Pastures.

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Blue billygoat weed, Common sensitive plant, Giant sensitive plant, Spinyhead sida.	Apply before flowering.	Qld, WA only	1.5	Add Uptake* Spraying Oil at 1 L/ha
St John's wort.	Apply from bud to full bloom (usually late Nov to early Jan).	ACT, NSW and Vic only	3	Some regrowth will occur. Treat regrowth the following season for best results. Use at least 200 L water/ha.
Silverleaf nightshade.	From onset of flowering to nightshade early berry-set. (usually spring to mid-summer).	NSW only	0.75 or 0.375 + 1.5 - 2L 2,4-D Amine (500 g/L).	Add Uptake* Spraying Oil at 1 L/ha. To ensure maximum effect, delay application until the majority of shoots have emerged. Follow-up treatment of regrowth is critical for best control.

Table 3: Sorghum, Maize, Millets and Sweet Corn (NSW and QLD only).

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
Sorghum	Apply when secondary roots are present, from 4 fully expanded leaves (15 cm tall) up to boot (also see CRITICAL COMMENTS).	Annual ground cherry, Wild gooseberry (<i>Physalis</i> spp.).	2 to 8 leaf. Up to 15 cm tall. 15 to 30 cm tall.	0.5 0.75	Sorghum: From 8 leaf to boot stage, use dropper nozzles to prevent herbicide coming in contact with the crop's leaves and the growing point (meristem). Maize and sweet corn: From 6 leaf to just before tasselling, use dropper nozzles to prevent the herbicide coming in contact with the crop's leaves and the growing point (meristem). Ⓞ Millets: DO NOT use mixes with atrazine products.
		Apple-of-Peru.	Seedling plants up to 15 cm tall		
Maize and Sweet corn	Apply when secondary roots are present, from 3 fully expanded leaves (10 cm tall) up to just before tasselling (See CRITICAL COMMENTS).	Bathurst burr, Noogoora burr.	2 to 8 leaf. Up to 20 cm tall. 20 to 50 cm tall.	0.5 0.75	Ⓞ Millets: DO NOT use mixes with atrazine products.
		Pigweed (<i>Portulaca oleracea</i>).	Up to 10 cm diameter. 10 to 30 cm diameter.	0.5 0.75	
		Sesbania pea.	2 to 6 leaf. Up to 10 cm tall	1.5	
Millets	Spray when secondary roots have developed, usually early to mid-tillering, and not later than before heads start to form at the base of tillers. (See CRITICAL COMMENTS).	Silverleaf nightshade (NSW only) Ⓞ	Full flower to early berry.	0.75 + Uptake* at 1 L/ha	This treatment may be slightly damaging to the crop. To minimise crop damage apply using dropper nozzles at all crop stages.
		Starburr (<i>Acanthospermum hispidum</i>) (Qld only)	Up to 12 leaf and before flowering.	1.5 or 0.75 + 2 L Atrazine (500 g/L)	
		Thomapples (<i>Datura</i> spp.).	2 to 8 leaf. Up to 15 cm tall	0.75	
		Volunteer sunflower.	2 to 5 leaf. Up to 20 cm tall.	1	

Staroxy 200 in tank-mixes with Atrazine: Sorghum, Maize and Sweet Corn

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
Sorghum, Maize and Sweet corn	Spray when secondary roots have developed, usually early to mid-tillering, and not later than before heads start to form at the base of tillers. (See CRITICAL COMMENTS).	<i>Amaranthus</i> spp. Including: Boggabri weed, Dwarf amaranth, Green amaranth, Redshank, Anoda weed, Bladder ketmia, Black pigweed (<i>Trianthema portulacastrum</i>), Caltrop (yellow vine) including: <i>Tribulus terrestris</i> , <i>T. micrococcus</i> and <i>T. maximus</i> , Cowvine (peach vine) (<i>Ipomoea lonchophylla</i>), Hairy wandering jew (<i>Commelina benghalensis</i>), Mintweed.	Seedling plants up to 15 cm tall or rosettes up to 15 cm diameter.	0.5 + 1.5 of Atrazine (500 g/L) or 0.75 + 2 of Atrazine (500 g/L).	Use the low rate (0.5 + 1.5 L) when weeds are small (5-7cm tall/diameter). Use the high rate (0.75 L + 2 L) when the weeds are larger (7 - 15cm tall/diameter). Staroxy 200 is generally more compatible with Liquid atrazine products (see GENERAL INSTRUCTIONS; compatibility section). Add a surfactant (see GENERAL INSTRUCTIONS; Oils and surfactants). DO NOT add an oil to mixtures of Staroxy 200 and Atrazine.
		<i>Euphorbia davidii</i>	Cotyledons to 4 nodes up to 15 cm.	1 + 2 of Atrazine (500 g/L).	
		Volunteer peanuts	Up to 15 cm diameter.	1 + 4.5 of Atrazine (500 g/L).	

Sweet Corn: Tasmania only

Sweet corn only	3 to 5 leaf.	Blackberry nightshade, Volunteer potatoes.	3 to 5 leaf.	1	
-----------------	--------------	--	--------------	---	--

Table 4: Winter Cereals (Wheat, Barley, Oats and Triticale).

CROP GROWTH STAGE	WEEDS CONTROLLED	CROP GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Apply from 3 leaf to flag (Zadoks 13 to 39)	Bedstraw (<i>Galium tricornutum</i>)	1 to 3 whorl.	Vic, SA, WA only	1	Ⓞ Add either Uptake* or a surfactant (see GENERAL INSTRUCTIONS; Oils and Surfactants). Useful suppression only.
	Cleavers (<i>Galium aparine</i>)		NSW, Vic only		
	Black bindweed (Climbing buckwheat)	2 to 4 leaf. 2 to 6 leaf.	NSW, Qld only	0.5 Ⓞ 0.75 or 0.5 + 5 g Metsulfuron-Methyl (600 g/kg) Ⓞ	Mixtures: Mixing partners with Staroxy 200 may reduce crop selectivity. Apply at crop growth stages according to the mixing partner's recommendation.
	Common sowthistle (<i>Sonchus oleraceus</i>)	2 to 5 leaf.		1	
	Deadnettle	2 to 6 leaf.		1.5 or 0.5 + 5 g Metsulfuron-Methyl (600 g/kg) Ⓞ	
	Spiny emex (Doublegee, Three cornered jack)	2 to 4 leaf.	NSW, SA, Qld, WA only		
	Prickly lettuce	2 to 5 leaf.	NSW, Qld, Tas, Vic, WA only	1	





CROP GROWTH STAGE (cont)	WEEDS CONTROLLED	CROP GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Apply from 3 leaf to flag (Zadoks 13 to 39)	Volunteer lupins	2 to 8 leaf.	NSW, Vic, WA only	1.5	Mixtures: Mixing partners with Staroxy 200 may reduce crop selectivity. Apply at crop growth stages according to the mixing partner's recommendation. Plants 15 to 30cm tall will only be suppressed.
	Volunteer potato	10 to 15 cm tall.	WA and Tas only		
	Wireweed	2 to 3 leaf.	NSW, Qld, SA, Tas, Vic, WA only		
			NSW and Qld only	0.5 + 5 g Metsulfuron-Methyl (600 g/kg) ☺	
	Bittercress (<i>Coronopus didymus</i>), Mustards, Shepherd's purse, Turnip weed, Wild radish, Wild turnip	Up to 8 leaf and up to 15 cm diameter.	Qld, NSW, Vic, SA, Tas, WA only	0.5 to 1.5 + Metsulfuron-Methyl (600 g/kg) ☺ or Eclipse* ☺ or MCPA or MCPA LVE or MCPA Amine.	The Staroxy 200 rate depends on what other weeds are present as listed above. See Mixtures comment above. Metsulfuron-Methyl (600 g/kg) ☺ @ 5 g/ha (This mix does not control wild radish). Eclipse* @ 5 - 7g/ha (use the 5 g rate on turnip weed only). LVE MCPA @ 700 mL/ha MCPA 500 @ 1.0 L/ha.

Table 5: Summer Fallow.

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Annual ground cherry, Wild gooseberry (<i>Physalis</i> spp.), Bathurst burr, Noogoora burr.	2 to 8 leaf, up to 20 cm tall.	NSW, Qld, Vic, WA only	0.75 ☺	☺ Add Uptake* Spraying Oil (see GENERAL INSTRUCTIONS; Oils and surfactants section) When mixing with Roundup CT to control both grass and broadleaf weeds, refer to the Roundup CT label for use rates and adjuvants recommended for the grasses (see GENERAL INSTRUCTIONS; Compatibility Section). ☺ Delay treatment until the maximum number of shoots have emerged, but before the onset of fruiting (late summer). DO NOT treat plants showing symptoms from previous treatment. Use the high rate when longer term weed control (6-10 months) is required and delay planting crops during this period. The low rate will require follow-up treatments.
Bellvine.	Pre-flowering.	NSW, Qld only	0.5 + 1.2 Roundup CT.	
Bladder ketmia.	4 to 8 leaf, up to 10 cm tall.			
Cowvine (Peach vine) (<i>Ipomoea lonchophylla</i>).	2 to 10 leaf up to 10 cm diameter.			
Caltrop (Yellow vine) including: <i>Tribulus terrestris</i> , <i>T. maximus</i> and <i>T. micrococcus</i> .	Up to 15 cm diameter.		0.5 + 1 Roundup CT.	
Pigweed (<i>Portulaca oleracea</i>).	Up to 10 cm diameter.		0.75 ☺	
	Up to 60 cm diameter.		0.75 + 1 Roundup CT	
<i>Polymeria pusilla</i> .	2 to 10 leaf up to 20 cm diameter		1 ☺ or 0.5 + 1.2 Roundup CT	
<i>Rhynchosia</i> .	Seedlings to early flowering.		1 ☺ or 0.375 + 0.8 Roundup CT	
Smallflower mallow or Marshmallow (<i>Malva parviflora</i>).	Up to 8 leaf up to 20 cm.		1 ☺	
Thornapples (<i>Datura</i> spp.).	2 to 8 leaf up to 15 cm diameter.	NSW, Qld, WA only	0.75 ☺ or 0.5 + 1.2 Roundup CT	
Sesbania pea.	2 to 6 leaf up to 10 cm tall.	NSW, Qld only	1.5 ☺ or 0.5 + 1.2 Roundup CT.	
Perennial Ground Cherry (<i>Physalis virginiana</i>). ☺	Bud to early flowering up to 20 cm tall.	NSW, Qld only	1.5 or 3 ☺	
Silverleaf nightshade.	Full flower to early berry-set (usually Dec- Feb).	NSW only	0.75 or 0.375 + 1.5 - 2 2,4-D Amine (500 g/L)	Add Uptake spraying oil at the rate of 1 L/100 L spray mixture. To ensure maximum effect, delay application until the majority of shoots have emerged. Follow-up treatment will be required to control regrowth and is critical for optimal control. If wanting to prevent seed set repeat applications may be needed in the same season, although this does not lead to better long term control.
Volunteer peanuts.	Up to 15 cm diameter.	Qld only	1 + 4.5 Atrazine flowable (500 g/L).	Add a surfactant (see GENERAL INSTRUCTIONS; Oils and surfactants) Important: See GENERAL INSTRUCTIONS; Compatibility section.
Volunteer sunflowers.	2 to 5 leaf up to 20 cm.	NSW, Qld only	1	Add Uptake Spraying Oil (see GENERAL INSTRUCTIONS; Oils and surfactants section).

Table 6: Winter Fallow.

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Bedstraw (<i>Galium tricomutum</i>)	Up to 5 whorl.	Vic, SA, WA only	1 ☺	☺ Add Uptake Spraying Oil (see GENERAL INSTRUCTIONS; Oils and surfactants section)
Cleavers (<i>Galium aparine</i>)		NSW, Vic only		
Black bindweed (Climbing buckwheat)	2 to 8 leaf up to 10 cm diameter.	NSW, Qld only	0.75 ☺	☺ Add Uptake Spraying Oil or a surfactant (see GENERAL INSTRUCTIONS; oils and surfactants section)
Common sowthistle (<i>Sonchus oleraceus</i>) Common sowthistle	2 to 5 leaf up to 10 cm diameter.		1.0 , or 0.5 + 0.6 Roundup CT.	When mixing with Roundup CT to control both grass and broadleaf weeds, refer to the label for use rates and adjuvants recommended for the grasses (see GENERAL INSTRUCTIONS; Compatibility Section)
Prickly lettuce				
Spiny emex (Doublegee, Three cornered jack)	2 to 8 leaf.		1.5 ☺ or 0.5 ☺ + 5 g Metsulfuron-Methyl (600 g/kg).	
Wireweed	2 to 3 leaf up to 10 cm tall.		1.5 ☺ or 0.5 ☺ + 5 g Metsulfuron-Methyl (600 g/kg) or 0.5 ☺ + 0.6 Roundup CT.	

Table 7: Sugar cane (Qld, NSW, NT and WA only).

CROP GROWTH STAGE	WEED CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
From early tillering to maturity	Balsam pear, Blackberry nightshade, Blue billygoat weed, Centro, Cowpea, Giant sensitive plant, Lablab bean, Noogoora burr, Phasey bean, Pinkburr, Prickly African cucumber, Spinyhead sida, Stinking passion flower (seedlings only).	Apply from 2 to 3 leaf until flowering.	Ground: 1.3 Aerial: 1.5	For optimal weed control, delay application until just before the "close-in" stage. Aerial application: Apply in not less than 60 L/ha water and add Uptake Spraying Oil at 1 L/100 L spray mixture. Ground application: Apply in 100 – 400 L/ha water and add Uptake Spraying Oil at 500 mL/100 L of spray mixture. Thoroughly wet plants to the point of run-off.
	Bellvine, Morning glory, Red or pink convolvulus, Star-of-Bethlehem, Stinking passion flower.	Established or ratoon plants with at least 1m of regrowth.	High volume: 450 mL/100 L water Knapsack: 70 mL/15 L water	
	Milkweed (<i>Euphorbia heterophylla</i>).	Seedlings and young plants up to flowering.	3 or 2.3 + 4 Atrazine flowable (500 g/L).	Better control will be achieved with the atrazine mixture. Delay application until just before the cane reaches the "close-in" stage. This will improve control and minimise the number of seedlings that germinate.

Table 8: Lucerne (NSW Only).

CROP GROWTH STAGE	WEED CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
Established crops at least lucerne eighteen months old.	Annual ground cherry, Bathurst burr, Noogoora burr, Wild gooseberry.	2 to 8 leaf up to 15cm high.	0.5	To minimise crop injury and to maximise weed control, cut, slash or heavily graze the lucerne before application. Wherever possible, irrigate before application to stimulate weed growth. DO NOT treat crops growing on sandy or stony soils. DO NOT treat crops after the summer growing season (after end of March). To broaden the spectrum of weeds controlled, Staroxy 200 can be mixed with 2,4-DB Amine.
	Pigweed.	Up to 10cm diameter.		

Table 9: Poppies (TAS only).

CROP GROWTH STAGE	WEED CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
4 to 6 leaf	Cleavers, Fumitory, Shepherd's purse, Wireweed.	2 to 6 leaf.	1	DO NOT apply Staroxy 200 to poppies later than the 8 to 10 leaf growth stage as a reduction of alkaloid content could occur.
			1 + 5 Asulox*	
8 - 10 leaf	Common sowthistle, Prickly lettuce.	2 to 5 leaf.	1	This rate will provide season long control of volunteer potato, but will not control all daughter tubers and will only suppress potatoes over 15 cm tall.
	Black nightshade.	cotyledon to 4 leaf.	1.5	
	Fumitory.	6 to 10 leaf.		
	Volunteer potato.	From tuber initiation to flower bud.		

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

WITHHOLDING PERIODS:

Grazing:

DO NOT GRAZE FAILED CROPS AND TREATED PASTURES OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

Harvest:

Poppies - DO NOT SPRAY POPPIES LATER THAN 10 WEEKS BEFORE HARVEST.

Other Crops - Not required when used as directed.

MINIMUM RECROPPING PERIODS

Plant-back periods for crops following the application of Staroxy 200 for rates up to 1.5 L/ha.			
RATE L/ha	0.375	0.75	1.5
CROP	Days		
Barley	7	7	7
Wheat	7	7	7
Chickpea	7	7	7
Cotton	14	14	28
Soybean	7	7	14
Sunflower	7	7	7
Maize	7	7	7
Sorghum	7	7	7

Note: Before using Staroxy 200 in tank mixes with other herbicides, check the plant-back information on all product labels. The time between spraying and planting will be determined by the most residual product, ie. the product with the longest plant-back period.

GENERAL INSTRUCTIONS:

MIXING

Staroxy 200 may be mixed with water or diesel. Mix only sufficient chemical for each days use and avoid storing.

Mixing in Water: Half fill the spray tank with water and add the required quantity of Staroxy 200 and complete filling. Agitate continuously to ensure thorough mixing before and during application.

Mixing in Diesel: Half fill the spray tank with diesel and add the required quantity of Staroxy 200. Add the remainder of the diesel and agitate or shake to mix contents.

Tank mixtures: Wettable powder or dry flowable formulations (eg water dispersible granules) should be added to the spray tank first, followed by suspension concentrates (Flowables), water soluble salts and then emulsifiable concentrate formulations (Staroxy 200). Add spraying oils and surfactants (wettters) last.

OILS AND SURFACTANTS

Oils:

Where specified use Uptake Spraying Oil at the rate of 500 mL/100 L of spray mix. When using less than 100 L/ha spray volume, ensure a minimum of 250 mL/ha of Uptake Spraying Oil is used, unless 1 L/100 L or 1 L/ha is specified.

Surfactants (wettters):

Use a 100% concentrate non-ionic surfactant such as BS 1000* at 100 mL/100 L spray mixture where required.

COMPATIBILITY

Staroxy 200 is compatible with the herbicides listed. Follow any regional restrictions, and all directions and restrictions on the label, of any product mixed with Staroxy 200.

Atrazine (see below)	Lontrol*	Tordon* 75-D
Ally*	Metsulfuron-methyl (600 g/kg)	Tordon 242
Broadstrike*	MCPA	Touchdown*
Eclipse*	Puma* S	2,4-D
Diclofop methyl	Roundup* (see below)	2,4-DB
Garlon* 600	Roundup CT* (see below)	
Glyphosate CT		

ATRAZINE

AVOID USING HARD WATER WHEREVER POSSIBLE.

Where hard water cannot be avoided, the addition of CALGON* water conditioning agent to the spray tank, at 100 g/100 L water, before adding any herbicide may improve compatibility.

AGITATION IS VERY IMPORTANT WHEN MIXING STAROXY 200 AND ATRAZINE.

Staroxy 200 plus atrazine tank mixes must be agitated vigorously and continuously during mixing and application. After mixing DO NOT allow to stand without agitation. Ensure that the time from mixing to the end of application is not more than 2 hours.

If settling out occurs re-suspension is difficult, even with vigorous agitation. Agitation using only the pump's by-pass is usually inadequate, particularly with larger tanks (more than 2000 L). Additional mechanical agitation will be necessary in large tanks, computer sprayers and mixing tanks.

When additional surfactant is required, add a non-ionic surfactant at 100 mL/100 L of spray mix. DO NOT use a spraying oil when tank mixing Staroxy 200 and atrazine.

Guidelines for tank-mixing Staroxy and Common atrazine formulations:

Tank Mix	Rate (L/ha)	Water Hardness			Min. Water Volume (L/ha)		Comments
		Soft	Med	Hard	Ground	Aerial	
Staroxy 200	0.75	✓	✓	✓	50	35	
Staroxy 200 + Gesaprim 500FW	0.75 + 2	✓	✓	✓	50 - 100	35	Precipitate can be easily resuspended.
Staroxy 200 + Atradox 900WG	0.75 + 1.1	✓	✗	✗	100	Do not use	Precipitate may be difficult to resuspend and may block nozzles.
Staroxy 200 + Nu-trazine 900 DF	0.75 + 1.1	✓	✗	✗	100	Do not use	Sediment may be difficult to resuspend and may block nozzles.
Staroxy 200 + Flowable Nu-trazine 500 FW	0.75 + 2.0	✓	✓	✗	100	Do not use	Precipitate may be difficult to resuspend and may block nozzles.

Topik 240 EC

Always use Uptake Spraying Oil with Staroxy 200 + Topik 240 EC tank-mixes at 500 mL/100 L of spray mix with a minimum of 250 mL/ha.

DO NOT mix Staroxy 200 with Topik 240 EC if the grass weeds are not actively growing. Always use the maximum label rate of Topik 240 EC for the appropriate grass growth stage.

DO NOT use Staroxy 200 at more than 0.75 L/ha in tank mixes with Topik 240 EC.

Roundup CT

When mixing Staroxy 200 with Roundup CT to control both grass and broadleaf weeds, refer to the Roundup CT label for use rate and adjuvants recommended for grasses. DO NOT use Roundup CT at less than 1.2 L/ha in tank mixes with Staroxy 200 when barnyard grass, buttongrass, crowfoot grass, native millet and Iverseed grass are the target species.

APPLICATION METHODS and WATER RATES

BROADCAST APPLICATION IN CROPPING, PASTURE AND FALLOW SITUATIONS.

A. Ground application (Boom)

Apply Staroxy 200 with an accurately calibrated boom sprayer, in at least 50 L/ha water (100-400 L/ha for sugar cane).

Flat fan nozzles are recommended using pressures in the range 200 to 300 kPa. Set the boom at a height to ensure a double overlap of the nozzle patterns.

B. Ground direct application (Dropper nozzles)

To minimise crop effects, dropper nozzles should be used in sorghum when the crop is beyond the 8 leaf growth stage and in maize and sweet corn when the crop is beyond the 6 leaf growth stage.

Adjust the nozzles to direct the spray into the base of the crop and away from the leaves and the growing point. See manufacturers directions for setting up and calibration of dropper nozzles.

C. Aerial Application

Apply in a minimum volume of at least 35 L/ha water (60 L/ha in sugar cane)

Use equipment calibrated to produce droplets with an average diameter (Volume Mean Diameter: VMD) of 250 - 350 microns.

DO NOT apply when the temperature is above 30°C, when there is no wind or when the wind is blowing toward susceptible crops.

DO NOT use human flaggers unless they are protected by engineering controls such as enclosed cabs.

WOODY WEED SITUATIONS

Weeds must be actively growing to attain optimal effect. Delay the treatment of regrowth following bulldozing, slashing, burning, ploughing or a previous chemical treatment until it has at least 1 metre of new, vigorous growth.

A. High Volume Application

Hand Gun

Apply the recommended mix to obtain full coverage of leaves and stems using a number 6-8 tip at 700 to 1500 kPa. To obtain good coverage, a spray volume of 1500 to 4000 L/ha (15 to 40 L/100 m²) is required per infested hectare.

Ensure thorough coverage to the point of runoff.

Knapsack

Knapsack sprayers may be used on smaller infestations where penetration and coverage of the canopy is easier to achieve. Use the same use rate and spray techniques as for handgun application.

B. Low Volume, High Concentrate Application Drench Gun or Grass-Powered Gun.

Apply the recommended mixture uniformly across the foliage by applying 50 mL shots to cover 4 to 5 m² of surface area of plant. This is approximately equivalent to 20 droplets per cm² of the leaf surface. Use a marking agent as recommended by the equipment manufacturer to check spray coverage.

C. Basal Bark and Cut Stump Application Basal Bark

DO NOT apply to wet stems as this can repel the diesel mixture.

Spray or paint the recommended mixture around the base of each stem from ground level to a height of at least 30 cm from the ground, wetting the bark to the point of runoff.

Apply with a paint brush or a pressure sprayer with an appropriate lance and solid cone nozzle. If using spray equipment use low pressures (≤ 200 kPa) sufficient to form a cone of spray. Old rough bark will require more spray than smooth or young thin bark.

Cut Stump

Apply the recommended mixture liberally to the freshly cut stump immediately after cutting. Apply by spraying or painting the cut surface and sides of the stump.

Best results are obtained when the stems are cut less than 15 cm above the ground.

CLEANING SPRAY EQUIPMENT

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto wasteland away from desirable plants and water courses.

Cleaning equipment after using water-based sprays:

Rinsing: After using Staroxy 200 Herbicide, 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 and nozzles. Drain and repeat the rinsing procedure twice.

Decantation (before spraying cotton and other sensitive crops; see PROTECTION OF CROPS):

Wash the tank and rinse the system as above. Then quarter fill the tank and add an alkali detergent (eg. Liquid SURF*, OMO* or DRIVE*) at 500 mL/100 L of water or the powder equivalent at 500 g/100 L and circulate throughout the system for at least 15 minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally, flush the system with clean water and allow to drain.

Cleaning equipment after using diesel-based sprays:

On completion of spraying, use a degreaser such as Caltex Kwik-D-Grease* to remove traces of diesel from the sprayer. Rinse tank and spray through nozzles with water to remove degreaser.

Then, quarter fill the tank with clean water and add an alkali detergent (eg. Liquid SURF*, OMO* or DRIVE*) at 50 mL/10 L of water or the powder equivalent at 50 g/10 L. Shake sprayer to circulate the washing solution throughout the sprayer, then spray the solution through the nozzles. Rinse well with clean water to remove the detergent.

To clean brushes and containers, spray liberally with degreaser. Hose off with clean water and repeat using detergents as above.

DO NOT use this equipment for any other purpose.

RESISTANT WEEDS WARNING

GROUP I HERBICIDE

Staroxy 200 Herbicide is a member of the pyridine group of herbicides. Staroxy 200 has a disrupters of plant cell growth mode of action. For weed resistance management Staroxy 200 is a Group I Herbicide.

Some naturally occurring weed biotypes resistant to Staroxy 200 and other Group I 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 Staroxy 200 or other Group I Herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, eChem (Australia) Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department or Agriculture, or eChem (Australia) Pty Ltd representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.

Susceptible crops include but are not limited to clovers, cotton, fruit, hops, lupins, ornamentals, peas, pine trees, potatoes, navy beans, safflower, shade trees, soybeans, sunflower, tobacco, tomatoes, vegetables, and vines.

Staroxy 200 can be damaging to susceptible crops during both growing and dormant periods. Grasses are normally unaffected by Staroxy 200 and establish quickly after treatment.

Transitory damage can occur on some species particularly those that spread by stolons such as couch grass (*Cynodon dactylon*), Kikuyu grass and carpet grass (*Axonopus* sp.).

DO NOT allow spray to drift onto susceptible crops, shade trees and *Pinus* spp.

DO NOT use under weather conditions or from spraying equipment which could be expected to cause spray to drift onto nearby susceptible plants.

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under withholding periods. Poisonous plants may become more palatable after spraying, therefore livestock should be kept out of the area until the plants have died down.

DO NOT allow stock to re-enter paddocks containing treated poisonous plants, until the plants have died down.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. Alongside waterways, treat only noxious weeds and poisonous plants.