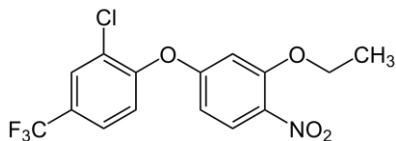




Cavalier[®] 500 SC

Herbicide



ACTIVE CONSTITUENT: 500 g/L Oxyfluorfen

(Residual and Knockdown herbicide.)

Non scheduled

GROUP **G** HERBICIDE

Cavalier® 500 Label listed Weeds Controlled.

Weeds Controlled List:

BEFORE GERMINATION	SEEDLINGS
Amsinckia (<i>Amsinckia</i> spp.)	Pigweed (<i>Portulaca oleracea</i>)
Barley grass (<i>Hordeum leporinum</i>)	Prickly lettuce (<i>Lactuca</i> spp.)
Barnyard grass (<i>Echinochloa</i> spp.)	Red Natal grass (<i>Rhynchelytrum repens</i>)
Blackberry nightshade (<i>Solanum nigrum</i>)	Redshank (<i>Amaranthus cruentus</i>)
Bladder ketmia (<i>Hibiscus trionum</i>)	Ryegrass (<i>Lolium</i> spp.)
Burrgrass (<i>Cenchrus australis</i>)	Sesbania pea (<i>Sesbania cannabina</i>)
Caltrop (<i>Tribulus terrestris</i>)	Shepherd's purse (<i>Capsella bursa-pastoris</i>)
Capeweed (<i>Arctotheca calendula</i>)	Small flowered mallow (<i>Malva parviflora</i>)
Chickweed (<i>Stellaria media</i>)	Soursob (<i>Oxalis pes-caprae</i>)
Crowsfoot grass (<i>Eleusine indica</i>)	Sow thistle (<i>Sonchus oleraceus</i>)
Deadnettle (<i>Lamium amplexicaule</i>)	Starburr (<i>Acanthospermum hispidum</i>)
Fat hen (<i>Chenopodium album</i>)	Stinkgrass (<i>Eragrostis cilianensis</i>)
Giant pigweed (<i>Trianthema portulacastrum</i>)	Summer grass (<i>Digitaria</i> spp.)
Liverseed grass (<i>Urochloa panicoides</i>)	Thornapple (<i>Datura stramonium</i>)
Lovegrass (<i>Eragrostis</i> spp.)	White eye (<i>Richardia brasiliensis</i>)
Pigeon grass (<i>Setaria</i> spp.)	Wild mustard (<i>Sisymbrium</i> spp.)
	Wild radish (<i>Raphanus raphanistrum</i>)
	Wireweed/Hogweed (<i>Polygonum aviculare</i>)
	Amsinckia (<i>Amsinckia</i> spp.)
	Bellvine (<i>Ipomoea</i> spp.)
	Capeweed (<i>Arctotheca calendula</i>)
	Common cotula (<i>Cotula australis</i>)
	Crowsfoot grass (<i>Eleusine indica</i>)
	Deadnettle (<i>Lamium amplexicaule</i>)
	Groundsel (<i>Senecio vulgaris</i>)
	Liverseed grass (<i>Urochloa panicoides</i>)
	Pigweed (<i>Portulaca oleracea</i>)
	Potato weed (<i>Galinsoga parviflora</i>)
	Redshank (<i>Amaranthus cruentus</i>)
	Shepherd's purse (<i>Capsella bursa-pastoris</i>)
	Sow thistle (<i>Sonchus oleraceus</i>)
	Small flowered mallow (<i>Malva parviflora</i>)*
	Stinging nettle (<i>Urtica urens</i>)
	Stinkgrass (<i>Eragrostis cilianensis</i>)
	Wild radish (<i>Raphanus raphanistrum</i>)



Guide to Tolerance of Crops and Susceptibility of Weeds to Herbicides

	Control Rating	
	Pre	Post
oxyfluorfen		
ageratum, tropic	1	0
amaranth, spiny	1	1
balsamapple	0	1
bedstraw, catchweed	1	1
bittercress	1	1
bittercress, lesser	1	1
bluegrass, annual	2	2
buckwheat, wild	1	1
burclover	1	0
buttercup, smallflower	1	1
buttonweed, Virginia	1	0
camphorweed	1	0
canarygrass	1	1
carpetweed	2	2
chamomile, mayweed	1	1
chamomile, mayweed	1	1
clover, red	2	2
clover, white	2	2
cocklebur, common	1	1
crabgrass, large	2	2
crotalaria	1	0
croton, tropic	0	1
cudweed, narrowleaf	1	2
fiddleneck, coast	2	2
filaree, broadleaf	1	2
filaree, redstem	1	2
filaree, whitestem	1	2
fireweed	1	1
flixweed	1	1

	Control Rating	
	Pre	Post
foxtail, giant	2	2
geranium, Carolina	1	1
goosegrass	2	2
groundcherry	1	1
groundcherry, cutleaf	1	1
groundcherry, wright	0	1
groundsel, common	1	1
henbit	1	1
horseweed	1	1
jimsonweed	1	1
knotweed, prostrate	1	1
ladysthumb	1	2
lambquarters, common	1	1
lettuce, miners	1	1
lettuce, prickly	1	1
mallow, little	1	1
morningglory, ivyleaf	2	2
morningglory, tall	2	2
mustard	1	1
mustard, black	1	1
mustard, blue	1	1
mustard, common yellow	1	1
mustard, hedge	1	1
mustard, tumble	1	1
mustard, wild	1	1
nettle, burning	1	1
nightshade	1	1
nightshade, American black	1	1
nightshade, black	1	1
nightshade, eastern black	1	1
nightshade, hairy	1	1
oat, wild	1	1
orach, red	1	1
oxalis, buttercup	2	1

	Control Rating	
	Pre	Post
pansy, field	1	1
pepperweed	1	1
pepperweed, clasping	1	1
pepperweed, Virginia	1	1
pigweed, prostrate	1	1
pigweed, redroot	1	1
pimpernel, scarlet	1	1
poinsettia, wild	1	2
puncturevine	1	1
purslane, common	2	2
pusley, Florida	1	1
rocket, London	1	1
rockpurslane, redmaids	1	1
ryegrass, Italian	0	2
sage, lanceleaf	0	1
sandspurry, red	1	1
sesbania, hemp	0	1
shepherdspurse	2	2
sicklepod	0	2
sida, prickly	1	2
smartweed, Pennsylvania	2	2
sorrel, red	1	1
sowthistle, annual	1	1
speedwell, birdseye	1	1
speedwell, Persian	1	1
spurge, garden	1	1
spurge, spotted	2	0
spurry, corn	1	1
tansymustard	1	1
thistle, bull	1	1



Cavalier® 500 SC Herbicide directions for use.

Enhancing broadleaf control as a spike. 36 mL with knockdown herbicides.
For use Boom.

Forestry other tree crops Rate 1.5L/ha to 1.9L/ha.

Handgun application (2mL/10m²)

Permit No 85190 Industrial areas, Non-crop Situations, Roadside, Rail and Rights-of-way. 1.5L/ha to 1.9L/ha. (Argo Industries) Jurisdiction: ALL States.

Handgun application (2mL/10m²)

Adama Future label extensions

- Fence lines, firebreaks,
- Non-crop Situations, Roadside, Rail and Rights-of-way.
- Handgun, knapsack.
- Aerial updating.



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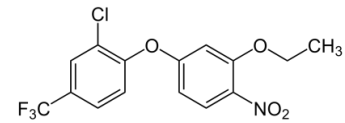
Oxyfluorfen Mode of Action: Group G herbicide

Residual and some knockdown. At low rates, oxyfluorfen acts as a contact herbicide, though it has good pre-emergence activity at higher rates.



Put simply It works by attacking the fats and proteins of plant cell membranes.(Effecting photosynthesis.)

- Inhibits protoporphyrinogen oxidase (or protox)
- Affects chlorophyll biosynthesis
- Causing cell membrane disruption and desiccation



Adding it to knockdowns give the power of two modes of action.

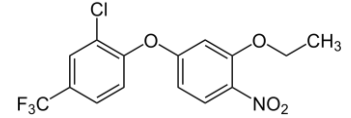


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Oxyfluorfen *Pesticide profile.*

Breakdown in soil and groundwater:



- Oxyfluorfen is moderately persistent in most soil environments, with a representative field half-life of about 30 to 40 days
- The main mechanism of degradation in soils may be photodegradation and evaporation/codistillation in moist soils .
- Oxyfluorfen is very well-sorbed to most soils Soil binding is highest in soils with high organic matter and clay content. (Creates a skin or membrane)
- Once oxyfluorfen is adsorbed to soil particles, it is not readily removed . (Very soil fast.)
- Oxyfluorfen did not leach below 10 cm in any soil except sand.

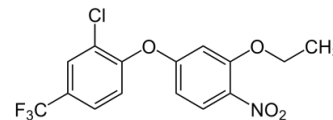


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Oxyfluorfen *Pesticide profile cont.*

Water



- It is practically insoluble in water, and therefore is unlikely to be appreciably mobile in most instances, unless the sorptive capacity of the soil is exceeded.
- Breakdown in water: In water, oxyfluorfen is rapidly decomposed by light .
- Because oxyfluorfen is nearly insoluble in water and has a tendency to adsorb to soil, it will be sorbed to suspended particles or sediments.
- Breakdown in vegetation: There is very little movement of oxyfluorfen within treated plants. It is not readily metabolized by plants, but since it is not readily taken up by roots, residues in plants are generally very low



Cavalier® 500 SC (Oxyfluorfen)

Summary of benefits use for Forestry

- *Is extremely soil fast and suitable for use by ground based in sensitive areas.*
- *Best results are obtained from use in combination.*
- Used as part of an IPM strategy. (Group G.) a great tool in your weed control program.
- No smell no problems
- Great environmental profile.
- Cost effective and the highest loaded Oxyfluorfen on the market.



Oxyfluorfen *Pesticide profile.*

Cavalier 500 has a great environmental profile.

Common Name	Pesticide Movement Rating	Soil Half-life (days)	Water Solubility (mg/l)	Sorption Coefficient (soil Koc)
Oxyfluorfen	Extremely Low	35	0.1	100,000



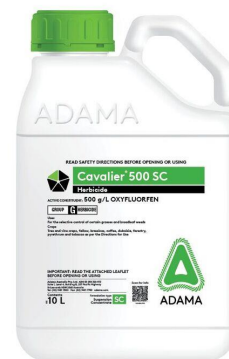
Source: PPDB - Pesticide Properties Data Base University of Hertfordshire and **Extoxnet** - The University of Michigan State, Oregon.



Cavalier® 500 SC Herbicide

APVMA Permit No 85190

Argo Industries Pty Ltd.



Cavalier® 500 sc APVMA Permit No 85190

Use All states. (1.5-1.9L/ha)

Industrial areas, Non-crop Situations, Roadside, Rail and Rights-of-way.

Critical Use Comments:

Maximum of one application per season.

Minimum re-treatment interval of 6 months.

Use in accordance with the approved label.

DO NOT apply by spraying equipment carried on the back of the user.

Grazing: DO NOT allow livestock to graze treated weeds.





Cavalier® 500 SC Boom application.

Brand	Poison schedual	Active	Mode of Action	Comments	Other
Cavalier® 500	None allocated	Oxyfluorfen	Group G	(Some knockdown and residual)	Residual control. Very soil fast no movement risks.

Regimes	Treatment	Situation	Chemical	Rate Product (Kg or L/ha)	Area sprayed (%)	Comments
Very Low Risk Treatment	Autumn Low EMS	Roadside and roadside furniture	Wipe Out Pro 540	1.6 - 2.5 L	100	Note Cavalier 500 (Under APVMA Permit no 85190) is registered for Forestry and other uses. Very low movement potential . Note Sulfometuron is at knockdown rates and its movement potential is reduced.
			Lynx (Metsulfuron methyl)	20 g		
			Cavalier® 500 SC	1 - 1.9 L		
			Pulse	0.2%		

Regimes	Treatment	Situation	Chemical	Rate Product (Kg or L/ha)	Area sprayed (%)	Comments
Low Risk Treatment	Autumn Low EMS	Roadside and roadside furniture	Wipe Out Pro 540	1.6 - 2.5 L	100	Note Cavalier 500 (Under APVMA Permit no 85190) is registered for Forestry and other uses. Very low movement potential . Note Sulfometuron is at knockdown rates and its movement potential is reduced. Note: some minor creep will occur.
			Metsulfuron methyl 600	20 g		
			Cavalier® 500 SC	1 - 1.9 L		
			Sulfometuron	20 g to 40 g		
			Pulse	0.2%		



Cavalier® 500 SC Hang gun application.

- **Assumes 1000/L ha adjust accordingly or apply as per the label @2ml per m².**

Cavalier® 500 @ 150 ml to 190mL /100 L. (Plus other herbicides listed)

- **Assumes 500/L ha adjust accordingly or apply as per the label @2ml per m².**

Cavalier® 500 @ 300 ml to 380mL /100 L. (Plus other herbicides listed)



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Cavalier® 500 SC (Oxyfluorfen)

Summary of benefits used under APVMA Permit No 85190



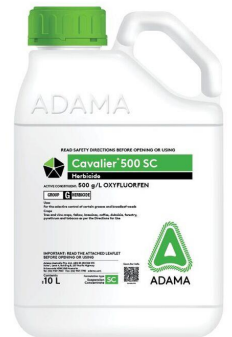
Is extremely soil fast and suitable for use in sensitive and any industrial weed control situation. (Great environmental profile.)

Used as part of an IPM strategy. (Group G.) a great tool in your weed control program.

Performs best in combinations with key herbicides.

No smell no problems

Cost effective and the highest loaded Oxyfluorfen on the market.



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More Information

John Campbell – Weedensol

IVM / Forestry Market Development Manager

M +61 447 750 923

E john.campbell@adama.com



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www.adama.com

