

# HALOVAP-75% WDG

HERBICIDE  
WATER DISPERSIBLE GRANULES

VAPCO

Class:  
Sulfonylurea

A selective herbicide before and after crop germination used to control weeds pre or post emergence including broadleaf weeds and nutsedges.

**COMPOSITION:** Each Kg contains:

HALOSULFURON-METHYL

75% W/W (A.I)

**PROPERTIES:**

**HALOVAP-75% WDG:** A selective and systemic herbicide, which is absorbed by roots and leaves, translocated in the phloem and xylem to meristem tissues.

**HALOVAP-75% WDG:** A herbicide that works by inhibition of acetolactate synthase (ALS) in weeds, therefore it stops cell division and plant growth.

**HALOVAP-75% WDG:** As soon as the growth of the target weeds stops, the color of the leaves and growths begins to change and then death.

**HALOVAP-75% WDG:** It hinders the growth of weeds, allowing the crop to grow.

**HALOVAP-75% WDG:** Depending on the stage and development of the targeted weeds, complete control generally takes place in 7 to 14 days.

**TIME INTERVAL (MONTHS) BEFORE PLANTING AFTER APPLICATION**

0	2	4	6	8	9	10	12	15	18	24	36
Sugarcane	Barley (winter), Cereal crops (Spring), Oats, Rice, Sorghums, Wheat (winter).	Cotton.	Peanuts.	Tomato (transplant)	Dry beans, Alfalfa, Cucumbers, Melons, Peas, Potatoes, Soybeans	Peppers.	Radish.	Cabbage, Carrot, Cauliflower, Mint.	Onions, Leeks, Sunflowers.	Spinach.	Strawberries, Crops not specifically listed

**CAUTION:**

- Used only on the crops mentioned in the table and follow the recommended safety period before harvest.
- Applications of this product may cause temporary yellowing or stunting of the crop.
- The maturity of the treated crops may be delayed by use of this product.
- In furrow application, if plastic is used on the planted row, adjust equipment to keep the application off the plastic.

• For more details about first aid & precautions please refer to first aid & precautions index.

PRE-EMERGENT WEED ACTIVITY				
Common Name	Scientific Name	Control	Suppression	Directions
Spiny Amaranth	<i>Amaranth spinosus</i>	X		Certain biotypes of this weed are known to be resistant to ALS herbicides
Common Cocklebur	<i>Xanthium strumarium</i>	X		
Corn Spurry	<i>Spergula arvensis</i>	X		
Dayflower	<i>Commelina erecta</i>	X		
Eclipta	<i>Eclipta prostrata</i>	X		
Galinsoga	<i>Galinsoga</i>	X		
Goosefoot	---	X		
Horseweed/Marestail	<i>Erigeron canadensis</i>	X		
Jimsonweed	<i>Datura stramonium</i>	X		
Nutsedge, Purple	<i>Cyperus rotundus</i>		X	Use higher application rates for suppression
Pigweed, Redroot	<i>Amaranthus retroflexus</i>	X		Certain biotypes of this weed are known to be resistant to ALS herbicides
Purslane	<i>Portulaca oleracea</i>		X	
Radish, Wild	<i>Raphanus raphanistrum</i>	X		
Shepardspurse	<i>capsella bursapastoris (L.) medicus</i>	X		
Sunflower	<i>Helianthus annuus</i>	X		
Velvetleaf	<i>Abutilon theophrasti</i>	X		
POST-EMERGENT WEED ACTIVITY				
Common Name	Scientific Name	Control	Suppression	Directions
Spiny Amaranth	<i>Amaranth spinosus</i>	X		Certain biotypes of this weed are known to be resistant to ALS herbicides
Barnyardgrass	<i>Echinochloa crusgalli</i>	X		
Bindweed	<i>Calystegia sepium</i>	X		
Johnsongrass rhizome, seedling	<i>Sorghum halepense</i>	X		
Mallow, Venice	<i>Hibiscus trionum</i>	X		
Milkweed, Common	<i>Asclepias syriaca</i>		X	
Millet, Wild Proso	<i>Panicum millaceum</i>	X		
Mustard, Wild	<i>Sinapis arvensis</i>	X		
Nutsedge, Yellow	<i>Cyperus esculentus</i>	X		Use higher application rates for suppression
Nutsedge, Purple	<i>Cyperus rotundus</i>	X		Use higher application rates for suppression
Oats	---	X		
Pigweed, Redroot	<i>Amaranthus retroflexus</i>	X		Certain biotypes of this weed are known to be resistant to ALS herbicides
Quackgrass	<i>Elytrigia repense</i>	X		
Radish, wild	<i>Raphanus raphanistrum</i>	X		
Ryegrass	<i>Lolium Multiflorum</i>	X		
Shepardspurse	<i>capsella bursapastoris (L.) medicus</i>		X	
Sunflower	<i>Helianthus annuus</i>	X		
Velvetleaf	<i>Abutilon theophrasti</i>	X		

#### GRAZING RESTRICTIONS:

Do not graze or feed animals before 30 days from the last application.

**COMPATIBILITY:** Compatible with other pesticides that are registered for the same crops, but do not mix with or allow to come into contact with oxidizing agents. And it's preferable to make compatibility test before spraying.

**RE ENTRY PERIOD:** 12 hours from the last application.

• For more details about first aid & precautions please refer to first aid & precautions index.

**USES AND APPLICATION RATE:**

CROP	APPLICATION RATE GM / DONUM	WATER LT. / DONUM	SAFETY PERIOD	NOTES
Tomato	4 -7	19	30	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Do not apply more than 14 g/donum/year.</li> <li>• <b>Direct seeded:</b> <b>Post-emergence:</b> Apply this product once tomatoes have reached the 4-leaf stage through first bloom stage. After bloom, applications must be made as a directed spray to minimize contact of the product with the crop.</li> <li>• <b>Transplant:</b> <b>Pre-transplant:</b> Seven (7) days after the application, transplant tomatoes into treated area and during the transplant process, take care to limit movement of soil. <b>Post-transplant:</b> Apply this product to tomato transplants that are established and actively growing. Apply to tomato transplants a minimum of 14 days after transplanting before first bloom.</li> <li>• <b>Furrow application:</b> Use this product between rows of direct-seeded or transplanted crop. Avoid contact of this product with the planted crop.</li> <li>• Use a spot treatment method to those areas where the nutsedge has broken through the plastic mulch, do not exceed 5.33g/donum.</li> <li>• A second spot treatment application is applied to the areas where nutsedge has re-grown or emerged Allow a minimum of 21 days between applications., and do not exceed 7 g/donum.</li> </ul>
Chili and bell Peppers	4 -7	19	30	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Do not apply more than 14 g/donum/crop cycle.</li> <li>• <b>Direct seeded:</b> <b>Post-emergence:</b> Apply as a directed spray 28 days after planting, or when the plants have reached a minimum of 15 cm height, but prior to flowering.</li> <li>• <b>Transplant</b> <b>Post-transplant:</b> Apply as a directed spray 21 days after transplanting, or when the plants have reached a minimum of 15 cm height, but prior to flowering.</li> <li>• <b>Furrow Applications</b> Avoid contact of this product with the planted crop.</li> </ul>

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CROP	APPLICATION RATE GM / DONUM	WATER LT. / DONUM	SAFETY PERIOD	NOTES
Sugarcane	5 -10	9.5 (14 - 19) In dense weed populations	30	<ul style="list-style-type: none"> <li>• Do not make more than 3 applications per year.</li> <li>• Do not apply more than 19 g/donum/year</li> <li>• Apply this product prior to planting, prior to emergence or after the emergence</li> </ul>
Cotton	5 -10	9.5 (14 - 19) In dense weed populations	28	<ul style="list-style-type: none"> <li>• Do not apply more than 10 g/donum/crop cycle</li> <li>• Apply this product as a directed spray in hooded equipment, use this product any time after cotton emergence until row closure inhibits use of hooded spray equipment</li> </ul>
Alfalfa	5 -10	19	14	<ul style="list-style-type: none"> <li>• Do not apply more than 14 g/donum/crop cycle.</li> </ul> <p><b>Post-emergence:</b></p> <ul style="list-style-type: none"> <li>• Do not exceed 5.33 g/donum as spot treatment application</li> <li>• Alfalfa must be in the field for a minimum of six months before application of this product.</li> <li>• Crop injury is reduced by applying as soon as possible after removal of hay from the field and prior to irrigation.</li> <li>• Delay irrigation for a minimum of 48 hours after treatment.</li> <li>• Use a spot treatment application for localized control of emerged nutsedge.</li> <li>• Growth and yield reduction may occur follow the instruction carefully to reduce the potential of yield reduction</li> </ul> <p><b>For nutsedge control:</b> A second spot treatment application is applied to the areas where nutsedge has re-grown or emerged</p>
Corn(field)	5-10	9.5 (14 - 19) In dense weed populations	30	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop use season.</li> <li>• Do not apply more than 19 g/donum/crop cycle.</li> </ul>
Eggplant	4-7	9.5 (14 - 19) In dense weed populations	30	<ul style="list-style-type: none"> <li>• Do not apply more than 14 g/donum/crop cycle.</li> <li>• <b>Furrow Applications:</b> Use this product between rows of direct-seeded or transplanted crop. Avoid contact of this product with the planted crop.</li> </ul>

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Cucumbers	4 -7	14	30	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Do not apply more than 14 g/donum/crop cycle.</li> </ul> <p>Additional phytotoxicity may occur when applications are made over plastic mulch due to concentration of product in the planting hole.</p> <p><b>Furrow Applications:</b> Use this product between rows of direct-seeded or transplanted crop.</p> <p><b>Direct seeded:</b> <b>Pre-seeding:</b> Use this product as a pre-seeding application under the plastic mulch. After final bed shaping and just prior to the installation of the plastic mulch. Plant the seed crops into the treated area after 7 days at least</p> <p><b>Post-emergence:</b> Use after the crop has reached at least 3-5 true leaves but before flowering, apply directed spray application. In case of using plastic mulch.</p> <p><b>Transplanted:</b> <b>Pre-transplant:</b> In case of using plastic mulch, application is done under it. After final bed shaping and just prior to the installation of the plastic mulch. Transplant the crop crops into the treated area after 7 days.</p> <p><b>Post-transplant:</b> Use this product to transplants that are actively growing. Do not apply until plants are in the 3-5 true leaf stage or no sooner than 14 days after transplanting but before flowering.</p> <ul style="list-style-type: none"> <li>• Use a spot treatment application for the control of emerged nutsedge. Do not exceed 7 g/donum in these areas. Use sufficient water volume to allow uniform coverage of the weeds.</li> <li>• Allow a minimum of 21 days between applications in post emergence</li> </ul>
Squash, Melon	4-7	9.5 (14 - 19) In dense weed populations	30 57	<ul style="list-style-type: none"> <li>• Do not apply more than 14 g/donum/crop cycle.</li> </ul> <p>• <b>Furrow Applications:</b> Use this product between rows of direct-seeded or transplanted crop.</p>

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Watermelons	4-5	19	57	<ul style="list-style-type: none"> <li>• Do not apply more than 7 g/donum/crop cycle, do not to exceed 14 g/donum/12 month period</li> <li>• <b>Direct seeded:</b> <b>Pre-emergence:</b> Where soil is fumigated prior to planting, allow at least five days after soil fumigation before application of this product.</li> <li><b>Pre-seeding:</b> use this product as a pre-seeding application under the plastic mulch. After final bed shaping and just prior to the installation of the plastic mulch. Plant the seed crops into the treated area after 7 days at least</li> <li>• <b>Transplanted:</b> <b>Pre-transplant:</b> In case of using plastic mulch, application is done under it. After final bed shaping and just prior to the installation of the plastic mulch. Transplant the crop crops into the treated area after 7 days. During the transplant process, take care to limit movement of soil.</li> <li><b>Furrow Applications:</b> • Use this product between rows of direct-seeded or transplanted crop, avoid contact of this product with the planted crop</li> </ul>
Pumpkins	4-5	14	30	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Do not apply more than 7 g/donum/ crop cycle.</li> <li><b>Direct-seeded:</b> • Can be used pre or post emergence. In post-emergence apply after the crop has reached preferably 4-5 true leaves, but before flowering.</li> <li><b>Transplanted:</b> • Crop may be transplanted into this treated area no sooner than 7 days after application.</li> <li>• Application should not be made until plants are actively growing and in the 3-5 true leaf stage or no sooner than 14 days after transplanting but before flowering.</li> <li>• During the transplant process, take care to limit movement of soil.</li> </ul>
Dry beans	4-7 , (4-5 post-emergence)	14	--	<ul style="list-style-type: none"> <li>• Do not apply more than 7 g/donum/crop cycle.</li> <li>• For lighter textured soils with low organic matter, use the lower rate.</li> <li>• <b>Furrow Applications:</b> Apply this product between rows of crop</li> </ul>

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CROP	APPLICATION RATE GM / DONUM	WATER LT. / DONUM	SAFETY PERIOD	NOTES
Almonds, cashew, pistachio, chestnut	5-10	9.5 (14 - 19) In dense weed populations	3	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop use season.</li> <li>• Do not apply more than 19 g/donum/use season.</li> <li>• Do not apply to gravelly soils.</li> <li>• Avoid contact of the spray containing this product with trunk, stems, roots, or foliage of tree nut crops</li> <li>• Application of this product to weakened or stressed trees as described, especially in soils with less than 1 % organic matter, significantly increases the probably of severe injury or death.</li> </ul>
Asparagus	4-11	14	3	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per crop cycle.</li> <li>• Do not apply more than 14g/donum/crop cycle.</li> <li>• Apply this product to asparagus before or during the harvesting season.</li> </ul> <p><b>Post-emergence/ Post-transplant:</b></p> <ul style="list-style-type: none"> <li>• For first year transplants, apply no sooner than six weeks after fern emergence, application during this time period may increase the potential for crop injury.</li> </ul> <p><b>Post-harvest:</b></p> <ul style="list-style-type: none"> <li>• Apply this product at the end of the harvest season.</li> <li>• Use drop nozzles to direct the spray below the fern to allow for more complete coverage of target weeds for better control of nutsedge and other broadleaf weeds while minimizing crop injury.</li> <li>• To enhance the control of nutsedge, use sequential applications during the harvest season, when appears in the 3-5 leaf stage, apply 5-7g/donum. Repeat application after 21-30 days later to control later flushes of nutsedge.</li> </ul>

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Soybean	5-10	9.5 (14 - 19) In dense weed populations	88	<ul style="list-style-type: none"> <li>• Do not make more than 1 application per year.</li> <li>• Do not apply more than 10 g/donum/crop year.</li> <li>• Do not apply to frozen ground.</li> <li>• Do not use more than 10 g/donum of this product in post-emergence application to sulfonyl-urea tolerant soybeans (STS).</li> <li>• Apply this product from 21 days before planting until prior to emergence</li> <li>• Do not apply this product if plans include planting Adzuki beans since unacceptable crop injury may occur</li> </ul>
Green beans	4-7 , (4-5 post-emergence)	14	30	<ul style="list-style-type: none"> <li>• Do not apply more than 7 g/donum/crop cycle, not to exceed 14 g/donum/12 month period</li> <li>• Application of this product may cause temporary stunting and delay maturity resulting in delayed harvest.</li> <li>• <b>Direct seeded:</b></li> <li>• <b>Pre-emergence:</b> For lighter textured soils with low organic matter, use the lower rate. Post-emergence: Apply after the crop has reached the 2-4 trifoliate leaf stage, but before flowering</li> <li>• <b>Furrow Applications:</b> Avoid contact of this product with the planted crop</li> </ul>
Grain Sorghum	5-7	9.5 (14 - 19) In dense weed populations	--	<ul style="list-style-type: none"> <li>• Do not make more than 1 application per use season.</li> <li>• Do not apply more than 7 g/donum/crop cycle.</li> <li>• Apply at the 2-leaf stage of grain sorghum (before the grain head emerges).</li> <li>• If grain sorghum is under stress, temporary stature reduction occurs to the crop following application of this product. After application this effect will be evident in 7 – 10 days but under normally growing conditions will quickly recover.</li> </ul>

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CROP	APPLICATION RATE GM / DONUM	WATER LT. / DONUM	SAFETY PERIOD	NOTES
Sweet corn	5	9.5 (14 - 19) In dense weed populations	30	<ul style="list-style-type: none"> <li>• Do not make more than 2 applications per year.</li> <li>• The maximum application 5 g/donum. Do not apply more than 10 g/donum/season.</li> <li>• Do not use on "Jubilee" sweet corn.</li> <li>• Do not apply this product to sweet corn previously treated with soil applied organophosphate insecticides.</li> <li>• Do not apply an organophosphate insecticide within 7 days before or 3 days after any application of this product.</li> <li>• Do not apply this product if the sweet corn is under severe stress due to drought, water-saturated soils, low fertility (especially low nitrogen levels) or other poor growing conditions.</li> <li>• After application, avoid cultivation for at least 7 days.</li> <li>• Not all sweet corn and popcorn hybrids or varieties have been tested for sensitivity to this product.</li> </ul>

**REMARKS:**

- Do not apply when wind speed exceeds 15 mph.
- In post-emergent weed applications, early treatment is best to control the weeds competing with the crop.
- Uniform, thorough spray coverage is important to achieve consistent weed control.
- The application equipment must be calibrated
- Clean application equipment immediately after use and prior to spraying
- The best drift management strategy is applying larger droplets as it reduces drift potential
- Do not apply this product through any type of irrigation system.
- Avoid operations (e.g. cultivation) in treated areas for at least 7 days after the application.
- Loss in effectiveness or crop injury may result if weeds are under drought, stress, disease or insect damage.
- Soil or foliar-applied organophosphate insecticides applied on crops treated with this product, may increase the potential for crop injury and/or the severity of the crop injury.
- Avoid spraying when conditions favor rainfall or using overhead sprinkler irrigation within 4 hours of this application it may cause to reduce effectiveness.

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