

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 9, 2019

Nikki Yepez Registration Specialist Canyon Group 370 S. Main Street Yuma, AZ 85364

Subject: Registration Review Label Mitigation for Halosulfuron

Product Name: Sedgehammer+

EPA Registration Number: 81880-24 Application Dates: November 6, 2017

Decision Numbers: 557222

Dear Ms. Yepez:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the 22 Sulfonylurea (SU) Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Jaclyn Pyne by phone at 703-347-0445, or via email at pyne.jaclyn@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure



HALOSULFURON-METHYL GROUP 2 HERBICIDE

SEDGEHAMMER®+

SEDGEHAMMER+ is a selective herbicide for the control of nutsedge and other weeds in turfgrass, ornamentals, landscaped areas and other specified non-crop areas.

% BY WT.

ACTIVE INGREDIENT:

Halosulfuron-methyl, methyl 3-chloro-5-(4,6-dimethoxypyrimidin-2-ylcarbamoylsulfamoyl)

-1-methylpyrazole-4-carboxylate 5.0%
OTHER INGREDIENTS: 95.0%

Total: 100.0%

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se las explique a usted en detaile. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID					
IF IN EYES	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice. 				
HOT LINE NUMBER					
Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For Medical emergencies involving this product, call toll free 1-888-478-0798.					

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls Statement: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:

Users should:

- · Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARD SECTION OF PRECAUTIONARY STATEMENTS

GROUNDWATER ADVISORY

Halosulfuron-methyl is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

NET CONTENTS ___ OUNCES

Produced For: Canyon Group, LLC c/o Gowan Company PO Box 5569 Yuma, AZ 85366-5569

EPA Reg. No. 81880-24 EPA Est. No.

SURFACE WATER ADVISORY

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of halosulfuron-methyl from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

WINDBLOWN SOIL PARTICLES

SEDGEHAMMER+ has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying SEDGEHAMMER+ if prevailing local conditions may be expected to result in off-site movement.

NON-TARGET ORGANISM ADVISORY

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water are:

- Coveralls,
- Shoes plus socks, and
- · Chemical-resistant gloves made out of any waterproof material.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep people off treated areas until spray solution has dried.

PRODUCT INFORMATION

SEDGEHAMMER+ is a water dispersible granule (WDG) that selectively controls sedges such as purple and yellow nutsedge, Kyllinga species and certain broadleaf weeds (see weeds controlled chart). SEDGEHAMMER+ can be applied to commercial and residential turfgrass and on other non-crop sites including: airports, campgrounds, cemeteries, established woody ornamentals in landscape areas, fairgrounds, fallow areas, fuel storage areas, golf courses, landscaped areas, lumberyards, public recreation areas, race tracks, residential property, rights-of-ways, roadsides, school grounds, sports fields, tank farms and tennis courts.

WEED RESISTANCE STATEMENT

SEDGEHAMMER+ contains a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to (Group 2) Halosulfuron-methyl herbicides. Weed species with acquired resistance to (Group 2) Halosulfuron-methyl may eventually dominate the weed population if (Group 2) Halosulfuron-methyl herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by SEDGEHAMMER+ or other (Group 2) herbicides.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance consider:

- Avoiding the consecutive use of SEDGEHAMMER+ or other target site of action Group 2 herbicides that have a similar target site of action, on the same weed species.
- Using tank mixtures or premixes with herbicides from different target site of action groups as long as the involved products are all
 registered for the same use, have different sites of action, and are both effective at the tank mix or prepack rate on the weed(s) of
 concern.
- Basing herbicide use on a comprehensive IPM program.
- Monitoring treated weed populations for loss of field efficacy.
 - Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.

- Fields should be scouted after application to verify that the treatment was effective.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

For further information or to report suspected resistance, you may contact Gowan Company at 1-800-883-1844.

APPLICATION EQUIPMENT AND INSTRUCTIONS

Calibrate application equipment prior to application of this product. Application should be uniform and of sufficient volume to avoid streaking or skips. SEDGEHAMMER+ often works with 1 application, but depending on the size and age of the nutsedge a second treatment may be required 6 - 10 weeks after the initial treatment.

Herbicide symptoms are likely to show within 2 weeks as a necrotic ring at the base of the plant, even though the leaves and stems remain green and a deep leathery green in color. **Note**: This product already contains a non-ionic surfactant. No additional mixtures are necessary.

USE PRECAUTIONS

- For optimum results, do not mow turf for 2 days before or 2 days after application.
- Avoid applications when rainfall is forecasted to occur within 4 hours.
- This product may be used on established seeded, sodded, or sprigged turfgrass. Allow the turf to develop a good root system and uniform stand before application.
- Treated areas may be overseeded with annual or perennial ryegrass or bermudagrass, 2 weeks after application.
- Avoid application of SEDGEHAMMER+ when turfgrass or nutsedge is under stress since turf injury and poor nutsedge control may result.
- Avoid excessive overlap of the spray.
- Annual and perennial herbaceous ornamentals, including color plants, may be injured when transplanted into landscaped areas treated with SEDGEHAMMER+.

USE RESTRICTIONS

- Do not exceed 5 1/3 oz by weight of this product (0.25 lb active ingredient) per acre per 12 month period.
- No more than 4 applications can be made per year with a minimum of 14 days between applications.
- Do not store SEDGEHAMMER+ in solution. Once the product is mixed with water apply immediately.
- Do not apply as an over the top spray to desirable flowers, ornamentals, vegetables, shrubs or trees.
- Do not apply this product to golf course putting greens.
- Do not apply this product through any type of irrigation system.
- Do not apply this product by air

WEEDS CONTROLLED BY SEDGEHAMMER+

C = Control, S = Suppression, NA = No Activity

WEED SPECIES	POSTEMERGENT	WEED SPECIES	POSTEMERGENT
	ACTIVITY		ACTIVITY
Burcucumber	S	Morningglory, tall & Ivyleaf	S
Sicyos angulatus		Ipomoea spp.	
Cocklebur, common	C	Mustard, wild	С
Xanthium strumarium		Sinapis arvensis	C
Corn Spurry	C	C Nutsedge, yellow	
Spergula arvensis		Cyperus esculentus	
Flatsedge, rice	С	Nutsedge, purple	С
Cyperus iria		Cyperus rotundus	
Fleabane, Philadelphia	С	Pigweed, redroot	С
Erigeron philadelphicus		Amarunthus retrofiexus	
Galinsoga	С	Pigweed, smooth	С
Galinsoga		Amaranthus hybridus	
Groundsel, common	NA	Pokeweed, common	С
Senecio vulgaris		Phytolacca Americana	
Jimsonweed	NA	Purslane	NA
Datura stramonium		Portulaca oleracea	
Kyllinga, annual	С	Radish, wild	С
Kyllinga sesquiflorus		Raphanus raphanistrum	
Kyllinga, green	С	Ragweed, common	С
Kyllinga breviflora		Ambrosia artemisiifolia	
Kochia	s	Ragweed, giant	С
Kochia scoparia	_	Ambrosia trifida	_
Ladysthumb	С	Shepherds purse	S
Polygonum persicaria		Capsella bursa-pastoris	
Lambsquarter, common	NA	Smartweed, Pennsylvania	С
Chenopodium album		Polyfonum pennsylvanicum	
Mallow. Venice	С	Sunflower, common	С
Hibiscus trionum		Helianthus annuus	
Milkweed, common	S	Velvetleaf	С
Asclepias syriaca		Abutilan theophrasti	
Milkweed, honeyvine	S		
Ampelamus albidus			

SEDGEHAMMER+ RATES AND APPLICATION INSTRUCTIONS

	1	IVALED AND	71 1 11	CATION INSTRUCTIONS		
CROP	RATE OZ	Z/ 1000 SQ FT		DIRECT	IONS FOR USE	
TURFGRASS (INCLUDING COMMERCIAL AND RESIDENTIAL TURFGRASS, GOLF COURSES, ESTABLISHED LAWNS, AND ORNAMENTAL	0.5 OZ (13.5 grams) or 1 pouch Mix in 1 gallon of water		Apply SEDGEHAMMER+ for postemergence control of purple or yellow nutsedge, Kyllinga¹ and broadleaf weeds. Mix 0.5 oz (13.5 grams) of this product (1 pouch) in 1 gallon of water to treat 1000 sq ft of turfgrass. Mix or shake the solution to ensure ingredients are completely dispersed. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants. For best results, spray nutsedge after it has reached the 3 - 8 leaf stage			
TURFGRASS)			of growth. ¹ For Optimum Kyllinga control 2 applications are recommended.			
	(27 or 2 Mix in 1 g	1 OZ ′ grams) pouches gallon of water	pouche Note: I suppre	es) in 1 gallon of water to treat This rate of product will contro ss horsetail that is greater tha		afed out. hes tall and
TURFGRASS (INCLUDING COMMERCIAL	Apply SEDGEHAMMER+ as directed under the conditions described to the following established turfgrasses that are tolerant to this product:				turfgrasses	
AND RESIDENTIAL TURFGRASS, GOLF				Cool-Season Grasses	;	
COURSES, ESTABLISHED LAWNS, AND		Bentgrass, cree Agrostis stoloni		Fescue, Fine Festuca arundinacea	Ryegrass, Perennial Lolium perenne	
ORNAMENTAL TURFGRASS) (continued)		Bluegrass, Kent <i>Poa pratensis</i>	ucky	Fescue, tall Festuca arundinacea		
				Warm-Season Grasses	S	
		Bahiagrass Paspalum notat	tum	Centipedegrass Eremochioa ophiuroides	Kikuyugrass Pennisetum clandestinum	
		Bermudagrass Cynodon dactyl	lon	Seashore paspalum Paspalum Vaginatum	Zoysiagrass Zoysia Japonica	
	Buffalograss Bouteloua dact		yloides	St. Augustine grass Stenotaphrum secundatum		
ESTABLISHED WOODY ORNAMENTALS IN LANDSCAPED AREAS	0.5 OZ (13.5 grams) or 1 pouch Mix in 1 gallon of water		Apply SEDGEHAMMER+ for postemergence control of purple or yellow nutsedge, Kyllinga¹ and broadleaf weeds. Mix 0.5 oz (13.5 grams) of this product (1 pouch) in 1 gallon of water to treat 1000 sq ft. Spray around established woody ornamental species in landscaped areas. For transplanted woody ornamentals, allow 3 months after transplanting before applying this product. Mix or shake the solution to ensure ingredients are completely dispersed. Spray			
			the target weeds thoroughly and wet the entire leaf suplants. For best results, spray nutsedge after it has rea of growth. 1 For Optimum Kyllinga control 2 applications are recom		of the entire leaf surface of the didge after it has reached the 3 - 8	undesirable
	(27 or 2	1 OZ ′grams) pouches gallon of water	pouche Note:	es) in 1 gallon of water to treat	tail apply 1 oz (27 grams) of this 1000 sq ft after horsetail has lea I horsetail that is less than 6 incl n 6 inches tall.	afed out.
FALLOW AREAS	REAS 0.5 OZ (13.5 grams) or 1 pouch Mix in 1 gallon of water		Apply SEDGEHAMMER+ for postemergence control of purple or yellow nutsedge, Kyllinga¹ and broadleaf weeds mix 0.5 oz (13.5 grams) of this product (1 pouch) in 1 gallon of water to treat 1000 sq ft. Spray on fallow areas prior to the establishment of turfgrass or woody ornamental plants. Allow 4 weeks between application and seeding or sodding of turfgrass, or transplanting woody ornamentals.			
			the targ plants. of grow	get weeds thoroughly and we For best results, spray nutsed	ngredients are completely disper of the entire leaf surface of the o dge after it has reached the 3 - 8 lications are recommended.	undesirable
	(27 or 2	1 OZ grams) pouches gallon of water	pouche Note:	es) in 1 gallon of water to treat	tail apply 1 oz (27 grams) of this 1000 sq ft after horsetail has lea I horsetail that is less than 6 incl n 6 inches tall.	afed out.

CROP	RATE OZ/ 1000 SQ FT	DIRECTIONS FOR USE
FENCE ROWS, FUEL STORAGE AREAS, LUMBERYARDS, TANK FARMS, RIGHT OF WAY, AND ROADSIDES	0.5 OZ (13.5 grams) or 1 pouch Mix in 1 gallon of water	Apply SEDGEHAMMER+ for postemergence control of purple or yellow nutsedge, Kyllinga¹ and broadleaf weeds mix 0.5 oz (13.5 grams) of this product (1 pouch) in 1 gallon of water to treat 1000 sq ft. Spray at specified rates on fence rows, fuel storage areas, lumberyards, tank farms, rights of ways, roadsides and other industrial sites. Mix or shake the solution to ensure ingredients are completely dispersed. Spray
		the target weeds thoroughly and wet the entire leaf surface of the undesirable plants. For best results, spray nutsedge after it has reached the 3 - 8 leaf stage of growth.
		This product may be tank mixed with Glyphosate herbicide. ¹ For Optimum Kyllinga control 2 applications are recommended.
	1 OZ (27 grams) or 2 pouches	For postemergence control of horsetail apply 1 oz (27 grams) of this product (2 pouches) in 1 gallon of water to treat 1000 sq ft after horsetail has leafed out.
	Mix in 1 gallon of water	Note: This rate of product will control horsetail that is less than 6 inches tall and suppress horsetail that is greater than 6 inches tall.
OTHER NON-CROP SITES (INCLUDING AIRPORTS, CAMPGROUNDS, CEMETERIES, FAIRGROUNDS, PUBLIC RECREATION AREAS, RACE TRACKS, RESIDENTIAL PROPERTY, SCHOOL GROUNDS, SPORTS FIELDS, AND	0.5 OZ (13.5 grams) or 1 pouch Mix in 1 gallon of water	Apply SEDGEHAMMER+ for postemergence control of purple or yellow nutsedge, Kyllinga¹ and broadleaf weeds mix 0.5 oz (13.5 grams) of this product (1 pouch) in 1 gallon of water to treat 1000 sq ft. Spray at specified rates on noncrop sites including: airports, campgrounds, cemeteries, fairgrounds, public recreation sites, race tracks, residential property, school grounds, sports fields, and tennis courts.
	1 OZ (27 grams) or 2 pouches	For postemergence control of horsetail apply 1 oz (27 grams) of this product (2 pouches) in 1 gallon of water to treat 1000 sq ft after horsetail has leafed out.
TENNIS COURTS)	Mix in 1 gallon of water	Note: This rate of product will control horsetail that is less than 6 inches tall and suppress horsetail that is greater than 6 inches tall.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store under cool, dry conditions (below 120°F). Do not store under moist conditions.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available, or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances

DISPOSAL AUTHORITIES: If none of the foregoing procedures is permitted by state and local authorities, then contact your State Pesticide or Environmental control Agency, or your local Hazardous Waste Disposal office, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300. For more product information, call toll-free 1-800-883-1844.

NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

<u>Important</u>: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Canyon Group, LLC. All such risks shall be assumed by the Buyer and User.

Canyon Group, LLC warrants that this product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. TO THE EXTENT CONSISENT WITH APPLICABLE LAW, CANYON GROUP, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISENT WITH APPLICABLE LAW, CANYON GROUP, LLC'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT CANYON GROUP LLC'S SOLE DISCRETION.

Chemtrec® is a registered trademark of American Chemistry Council, Inc. SEDGEHAMMER®+is a registered trademark of Gowan Company.

EPA Text: SEDGEHAMMER+ (To EPA 5-1-19)