

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 16, 2015

Nikki Yepez Registration Specialist Canyon Group LLC 370 S. Main St. Yuma AZ 85364

Subject: Label Amendment – Reformatting label and revising precautions and restrictions

Product Name: Sedgehammer EPA Registration Number: 81880-1 Application Date: August 18, 2015

Decision Number: 508723

Dear Ms. Yepez:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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.

Page 2 of 2 EPA Reg. No. 81880-1 Decision No. 508723

Your release for shipment of the product 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. If you have any questions, please contact Shanta Adeeb by phone at 703-347-0502, or via email at <a href="mailto:adeeb.shanta@epa.gov">adeeb.shanta@epa.gov</a>.

Sincerely,

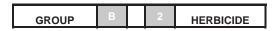
Reuben Baris, Product Manager 25

Herbicide Branch

Registration Division (7505P)

Office of Pesticide Programs

Enclosure



## **SEDGEHAMMER**® TURF HERBICIDE

SEDGEHAMMER is a selective herbicide for the control of nutsedge and other weeds in turfgrass and landscaped areas.

% by Wt.

**ACTIVE INGREDIENT:** 

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

OTHER INGREDIENTS: 25.0%

**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	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.</li> <li>Call poison control center or doctor for treatment advice.</li> </ul>				
IF SWALLOWED	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> </ul>				
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. Harmful if swallowed. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

## 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 thoroughly 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 HAZARDS**

This product is toxic to non-target vascular plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

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.

> ACCEP THET SONTENTS \_\_\_ OUNCES 11/16/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 81880-1

Produced For: Canyon Group c/o Gowan Company P.O. Box 5569 Yuma, AZ 85366-5569

EPA Reg. No. 81880-1 EPA Est. No.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a 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 into 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, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- · Shoes plus socks

## **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 selective herbicide for postemergence control of sedges such as purple and yellow nutsedge in established lawns, ornamental turfgrass, and landscaped areas. SEDGEHAMMER can be applied to commercial and residential turf and on other non-crop sites including: airports, campgrounds, cemeteries, fairgrounds, fence rows, fallow areas, fuel storage areas, golf courses, landscaped areas, established woody ornamentals in landscape areas, lumberyards, public recreation areas, race tracks, residential property, rights-of-way, roadsides, school grounds, sod or turf seed farms, sports fields, tank farms and tennis courts.

## WEED RESISTANCE STATEMENT

Weeds can develop resistance to herbicides. Some weed biotypes have inherent resistance to certain herbicides. Also, repeated use of herbicides with similar modes of action can result in the development of resistance in weed populations. SEDGEHAMMER, a member of the sulfonylurea family, is an ALS enzyme inhibiting herbicide. To minimize the potential for resistance development and/or to control resistant weed biotypes, use a variety of cultural, mechanical, and chemical weed control tactics. Rotate with herbicides having other modes of action (e.g. non-ALS/AHAS materials). Contact your professional crop advisor, local cooperative extension specialist, or Canyon Group, LLC representative for additional information.

## 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. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants. Avoid excessive overlap of the spray.

**Instructions for water dispersible granule in 1.3 oz bottle:** Mix 0.9 gram of this product (using the measuring scoop provided) in one or two gallons of water to treat 1000 square feet. Add 2 teaspoons (1/3 fluid ounce) of nonionic surfactant per gallon of water. Ensure the product is measured as a level scoop and not rounded.

**Instructions for water dispersible granule premeasured in water soluble bag:** Add one (1) 0.9 g water soluble bag of this product per 1 or 2 gallons of water in a hand-held or backpack sprayer to treat 1000 sq ft. Add 2 tsp (1/3 fluid ounce) of a nonionic surfactant per gallon of spray solution. Mix or shake thoroughly for at least two minutes to ensure that the water soluble bag and ingredients are completely dispersed. Occasionally shake the spray solution while spraying to ensure that it remains thoroughly mixed.

## **ADJUVANTS**

Always use 0.25-0.5 percent v/v of a nonionic surfactant (1-2 quarts per 100 gallons of spray solution) for broadcast applications. For high volume applications, DO NOT exceed 1 quart of surfactant per acre. Use only nonionic surfactants that contain at least 80 percent active material.

## **MIXING INSTRUCTIONS**

This product can be tank mixed with Glyphosate herbicide for application as a directed spray in landscaped or fallow areas. Tank mix with Glyphosate herbicide in landscape and fallow areas and turf renovation. Do not exceed the specified amount of surfactant due to the potential for turf injury at higher rates. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture. (For Example: first aid from one product, spray drift management from another).

#### **USE PRECAUTIONS**

- For best results, do not mow turf for 2 days before or 2 days after application.
- For best results, use the lower rate in light infestations and the higher rate in heavy infestations.
- Avoid applications when rainfall is forecasted to occur within 4 hours.
- This product can be used on seeded, sodded, or sprigged turfgrass that is well established. Allow the turf to develop a good root system and uniform stand before application.
- Treated areas can be overseeded with annual or perennial ryegrass or bermudagrass, 2 weeks after application.
- Color plants or herbaceous ornamentals may be injured when transplanted into landscaped areas treated with SEDGEHAMMER.
- Avoid application of SEDGEHAMMER when turfgrass or nutsedge is under stress since turf injury and poor nutsedge control may
  result.

## **USE RESTRICTIONS**

- No more than 4 applications can be made per year
- Do not exceed 5 1/3 oz by weight of this product (0.25 lb active ingredient) per acre per 12 month period
- 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.
- Do not exceed the specified amount of surfactant due to the potential for turf injury at higher rates. Refer to the surfactant label and observe all precautions, mixing and application instructions.

#### 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		lpomoea spp.		
Cocklebur, common	С	Mustard, wild	С	
Xanthium strumarium		Sinapis arevensis		
Corn Spurry	С	Nutsedge, Yellow	С	
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			
Asclepias syriaca		Abutilan theophrasti		
Milkweed, honeyvine	S			
Ampelamus albidus				

## RATES AND TIMING OF APPLICATION

CROP	RATE OZ/A		DIRECTIONS FOR USE				
TURFGRASSES (INCLUDING COMMERCIAL AND RESIDENTIAL TURFGRASS, GOLF COURSES, ESTABLISHED LAWNS, ORNAMENTAL TURFGRASS AND LANDSCAPED AREAS)	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A) F S,		Broadcast Applications: Apply SEDGEHAMMER as a postemergence spray at 2/3 - 1 1/3 oz by weight of this product per acre (0.031 - 0.062 lb ai/A) after nutsedge has reached the 3 - 8 leaf stage of growth, for control of purple or yellow nutsedge and broadleaf weeds found in established turfgrass.  A second treatment can be applied 6 - 10 weeks after the initial treatment.  Spot Treatments:  Mix 0.9 g of this product in 1 or 2 gal of water to treat 1000 sq ft. Add 2 tsp				
	(1/3 fl oz) of nonionic surfactant per gallon of When applied as directed under the conditions described, the following etolerant to this product:				rasses are		
				Cool-Season Grasses			
		Bentgrass (Agrostis	, creeping stolonifera)	Fescue, Fine (Festuca arundinacea)		grass, Perennial um perenne)	
		Bluegrass (Poa prate	, Kentucky ensis)	Fescue, tall (Festuca arundinacea)			
			Warm-Season Grasses				
		Bahiagrass (Paspalum	notatum)	Kikuyugrass (Pennisetum clandestin		Zoysiagrass (Zoysia Japonica)	
	Bermuda (Cynodol Centiped (Eremodol ophiuroid		rass dactylon)	Seashore paspalum (Paspalum Vaginatum)			
			oa	St. Augustine grass (Stenotaphrum secundatum)			
ESTABLISHED WOODY ORNAMENTALS IN LANDSCAPE AREAS	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A)		Broadcast Applications: Apply SEDGEHAMMER as a postemergence spray at 2/3 - 1 1/3 oz by weight of this product per acre (0.031 - 0.062 lb ai/A) around any established woody ornamental species in landscaped areas.  A second treatment can be applied 6 to 10 weeks after the initial treatments:  Mix 0.9 g of this product in 1 or 2 gal of water to treat 1000 sq ft. Add 2 tsp (1/3 fl oz) of nonionic surfactant per gallon of water.  For transplanted woody ornamentals, allow 3 months after transplanting before applying this product.  Avoid contact of this product to leaves of desirable plants since foliar injury discoloration or death may result.				of 1 - 0.062 lb indscaped tial treatment.  ft. Add 2 tsp insplanting
FALLOW AREAS	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A)		Broadcast Applications: Apply SEDGEHAMMER as a postemergence spray at 2/3 - 1 1/3 oz by weight of this product per acre (0.031 - 0.062 lb ai/A) to fallow areas prior to the establishment of turfgrass or woody ornamental plants.  A second treatment can be applied 6 to 10 weeks after the initial treatment Spot Treatments:  Mix 0.9 g of this product in 1 or 2 gal of water to treat 1000 sq ft. Add 2 ts (1/3 fl oz) of nonionic surfactant per gallon of water.				tial treatment.
			For Fallow areas, allow 4 weeks between applications and seeding or sodding of turfgrass, or transplanting woody ornamentals.				eding or

CROP	RATE OZ/A	DIRECTIONS FOR USE			
FENCE ROWS, FUEL STORAGE AREAS, LUMBERYARDS, TANK FARMS, RIGHT-OF WAY AND ROADSIDES	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A)	<b>Broadcast Applications:</b> Apply SEDGEHAMMER as a postemergence spray at 2/3 - 1 1/3 oz by weight of this product per acre (0.031 to 0.062 lb ai/A) to roadsides and other industrial sites.			
		A second treatment can be applied 6 to 10 weeks after the initial treatment.			
		Spot Treatments: Mix 0.9 g of this product in 1 or 2 gal of water to treat 1000 sq ft. Add 2 tsp (1/3 fl oz) of nonionic surfactant per gallon of water.			
		When applied postemergence, this product will suppress the following weeds: cocklebur, common sunflower, common ragweed, giant ragweed, pigweed, and velvetleaf.			
		NOTE: This product can be tank mixed with Glyphosate herbicide.			
	2 2/3 (0.125 lb ai/A)	FOR CONTROL OF HORSETAIL ( <i>Equisetum arvense</i> ).  Apply SEDGEHAMMER as a postemergence at 2 2/3 oz by weight of this product per acre (0.125 lb ai/A) after horsetail has leafed out. This rate of product will control horsetail that is less than 6 inches tall and suppress horsetail that is greater than 6 inches tall.			
		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.			
OTHER NON-CROP SITES (INCLUDING AIRPORTS, CAMPGROUNDS, CEMETERIES, FAIRGROUNDS, PUBLIC RECREATION AREAS, RACE	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A)	<b>Broadcast Applications:</b> Apply SEDGEHAMMER as a postemergence spray at 2/3 - 1 1/3 oz by weight of this product per acre (0.031 to 0.062 lb ai/A) after nutsedge has reached the 3 to 8 leaf stage of growth to other non-crop sites.			
TRACKS, RESIDENTIAL		A second treatment can be applied 6 to 10 weeks after the initial treatment.			
PROPERTY, SCHOOL GROUNDS, SPORTS FIELDS, AND TENNIS COURTS)		Spot Treatments: Mix 0.9 g of this product in 1 or 2 gal of water to treat 1000 sq ft. Add 2 tsp (1/3 fl oz) of nonionic surfactant per gallon of water.			
SOD OR TURF SEED FARMS	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A)	<b>Broadcast Applications:</b> Apply SEDGEHAMMER as a postemergence spray at 2/3 - 1 1/3 oz by weight of this product per acre (0.031 to 0.062 lb ai/A) after nutsedge has reached the 3 to 8 leaf stage of growth to sod or turf seed farms.			
		A second treatment can be applied 6 to 10 weeks after the initial treatment.			
		Spot Treatments: Mix 0.9 g of this product in 1 or 2 gal of water to treat 1000 sq ft. Add 2 tsp (1/3 fl oz) of nonionic surfactant per gallon of water.			

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or 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 that cannot be used or chemically reprocessed must be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures, or in such other method as approved under those procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is destroyed.

## **CONTAINER HANDLING:**

## INSTRUCTIONS FOR WATER DISPERSIBLE GRANULE IN 1.3 OUNCE BOTTLE:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

**INSTRUCTIONS FOR WATER DISPERSIBLE GRANULE PREMEASURED IN WATER SOLUBLE BAG:** Nonrefillable container. Do not reuse or refill this container. Completely use water soluble bags in application equipment. Offer for recycling if available, or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken.

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

Important: 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 Gowan Company. All such risks shall be assumed by the Buyer and User.

Gowan Company 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, GOWAN COMPANY 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, GOWAN COMPANY'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 GOWAN COMPANY'S SOLE DISCRETION.

SEDGEHAMMER® is a registered trademark of Gowan Company L.L.C. Chemtrec® is a registered trademark of American Chemistry Council, Inc. Product is protected by U.S. Patent No. 4,668,277.

EPA Text: (To EPA 10-27-2015)