

# SEDGEHAMMER<sup>®</sup> 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)
-1-methylpyrazole-4-carboxylate
OTHER INGREDIENTS:

	75.0%
	<u>25.0%</u>
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			

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

• 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.



b Company

Distributed by: Gowan Company P.O. Box 5569 Yuma, AZ 85366-5569

EPA Reg. No. 81880-1-10163

Users should:

## ENVIRONMENTAL HAZARD SECTION OF PRECAUTIONARY STATEMENTS

#### **GROUNDWATER ADVISORY**

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.

#### 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.

## 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.

## 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.

#### 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.

## **PRODUCT INFORMATION**

SEDGEHAMMER is a water dispersible granule (WDG) that selectively controls broadleaf weeds and nutsedges 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

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:

• Rotate the use of (Sedgehammer Herbicide) or other Group (2) herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner.
- Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage ( or other mechanical control methods), cultural ( e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include:
  - (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is
    - achieved on adjacent weeds;
    - (2) a spreading patch of non-controlled plants of a particular weed species;
    - (3) surviving plants mixed with controlled individuals of the same species.
- If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes. For further information or to report suspected resistance or lack of performance, you may contact Gowan Company at 1-800-883-1844.
- For mixtures of herbicides remind the user that each listed weed may not be controlled by multiple mechanisms of action.

## SPRAY DRIFT

- Boom-less Ground Applications:
   Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
  - Do not apply when wind speeds exceed 10 miles per hour at the application site.
  - Do not apply during temperature inversions.

**Boom-less Ground Applications:** 

## SPRAY DRIFT ADVISORIES

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

## 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 0.9 gram 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.

## 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 for use and precautionary statements of each product in the tank mixture.

## **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 with a minimum of 14 days between applications.
- 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 ACTIVITY	WEED SPECIES	POSTEMERGENT ACTIVITY	
Burcucumber Sicyos angulatus	S	Morningglory, tall & lvyleaf Ipomoea spp.	S	
Cocklebur, common Xanthium strumarium	С	Mustard, wild Sinapis arvensis	С	
Corn Spurry Spergula arvensis	С	Nutsedge, yellow Cyperus esculentus	С	
Flatsedge, rice <i>Cyperus iria</i>	С	Nutsedge, purple Cyperus rotundus	С	
Fleabane, Philadelphia Erigeron philadelphicus	С	Pigweed, redroot Amarunthus retrofiexus	С	
Galinsoga <i>Galinsoga</i>	С	Pigweed, smooth Amaranthus hybridus	С	
Groundsel, common Senecio vulgaris	NA	Pokeweed, common Phytolacca Americana	С	
Jimsonweed Datura stramonium	NA	Purslane Portulaca oleracea	NA	
Kyllinga, annual <i>Kyllinga sesquiflorus</i>	С	Radish, wild Raphanus raphanistrum	С	
Kyllinga, green <i>Kyllinga breviflora</i>	С	Ragweed, common Ambrosia artemisiifolia	С	
Kochia <i>Kochia scoparia</i>	S	Ragweed, giant Ambrosia trifida	С	
Ladysthumb Polygonum persicaria	С	Shepherds purse Capsella bursa-pastoris	S	
Lambsquarter, common Chenopodium album	NA	Smartweed, Pennsylvania Polygonum pensylvanicum	С	
Mallow, Venice <i>Hibiscus trionum</i>	С	Sunflower, common Helianthus annuus	С	
Milkweed, common Asclepias syriaca	S	Velvetleaf Abutilan theophrasti	С	
Milkweed, honeyvine <i>Ampelamus albidus</i>	S			

## 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)	<ul> <li>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 and yellow nutsedge and control and/or suppression of listed broadleaf weeds found in established turfgrass.</li> <li>A second treatment can be applied 6 - 10 weeks after the initial treatment.</li> <li>Spot Treatments:</li> <li>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.</li> </ul>

	When applied as direct tolerant to this product		onditions described, the fo	ollowing es	stablished turfo	grasses are
	Cool-Season Grasses					
		ass, creeping tis stolonifera)	Fescue, Fine         Ryegrass, Per           (Festuca arundinacea)         (Lolium perendition)			
		ass, Kentucky <i>ratensis)</i>	Fescue, tall (Festuca arundinacea)			
		Warm-Season Grasses				
	Bahiag <i>(Paspa</i>	rass lum notatum)	Kikuyugrass (Pennisetum clandestin		siagrass <sub>Y</sub> sia japonica)	
		dagrass Ion dactylon)	Seashore paspalum (Paspalum vaginatum)			
	Centipo (Eremo ophiuro		St. Augustine grass (Stenotaphrum secundatum)			
ESTABLISHED WOODY ORNAMENTALS IN LANDSCAPE AREAS	MENTALS IN LANDSCAPE (0.031 to 0.062 lb ai/A) spray at 2/3 - 1 1/3 oz by weight of this product per acre (0.031 - 0.062 lb ai/A)			031 - 0.062 lb n landscaped e and control		
		Spot Treat Mix 0.9 g o	reatment can be applied 6 ments: f this product in 1 or 2 gal f nonionic surfactant per g	l of water t	to treat 1000 s	
			anted woody ornamental ying this product.	ls, allow 3	3 months after	transplanting
			act of this product to leave on or death may result.	es of desira	able plants sind	ce foliar injury,
FALLOW AREAS	2/3 – 1 1/3 (0.031 to 0.062 lb ai/	<ul> <li>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. This product will control purple and yellow nutsedge and control and/or suppress listed broadleaf weeds (see weeds controlled char for additional information).</li> <li>A second treatment can be applied 6 to 10 weeks after the initial treatment</li> </ul>				031 - 0.062 lb. ass or woody nutsedge and ontrolled chart
		(1/3 fl oz) o For Fallow	<b>ments:</b> f this product in 1 or 2 gal f nonionic surfactant per g areas, allow 4 weeks t turfgrass, or transplanting	gallon of w between a	vater. applications ar	
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/					
ROADSIDES		A second treatment can be applied 6 to 10 weeks after the initial treatmen				
			<b>ments:</b> f this product in 1 or 2 gal f nonionic surfactant per g			q ft. Add 2 tsp
		suppress lis information <b>NOTE:</b> This pesticide u mixtures ar	s product can be tank mix ser's responsibility to er re registered for the inter lirections for use and pred	e weeds c and with Glansure that anded use.	controlled char lyphosate herb t all products Users must fo	t for additional bicide. It is the in the listed llow the most

	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 TRACKS, RESIDENTIAL PROPERTY, SCHOOL GROUNDS, SPORTS FIELDS, AND TENNIS COURTS)	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A)	<ul> <li>Broadcast Applications: 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. This product will control purple and yellow nutsedge and control and/or suppress listed broadleaf weeds (see weeds controlled chart for additional information).</li> <li>A second treatment can be applied 6 to 10 weeks after the initial treatment.</li> <li>Spot Treatments:</li> <li>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.</li> </ul>
SOD OR TURF SEED FARMS	2/3 – 1 1/3 (0.031 to 0.062 lb ai/A)	<ul> <li>Broadcast Applications: 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. This product will control purple and yellow nutsedge and control and/or suppress listed broadleaf weeds (see weeds controlled chart for additional information).</li> <li>A second treatment can be applied 6 to 10 weeks after the initial treatment.</li> <li>Spot Treatments:</li> <li>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.</li> </ul>

## 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.

**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<sup>®</sup> (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<sup>®</sup> is a registered trademark of Gowan Company L.L.C. Chemtrec<sup>®</sup> is a registered trademark of American Chemistry Council, Inc. Product is protected by U.S. Patent No. 4,668,277.

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