

BENZOBICYCLON	GROUP	27	HERBICIDE
HALOSULFURON-METHYL	GROUP	2	HERBICIDE



For selective control of susceptible grass, broadleaf and sedge weeds in California water seeded rice

ACTIVE INGREDIENT:	%BY WT.
Benzobicyclon, -3-[2-chloro-4-(methylsulfonyl)benzoyl]-4-(phenylthio) bicyclo-[3.2.1]oct-3-en-2-one.....	3.00%
Halosulfuron-methyl, methyl 3-chloro-5-(4,6-dimethoxyimidin-2-ylcarbamoylsulfamoyl)-1-methylpyrazole-4-carboxylate.....	0.64%
Other Ingredients:.....	96.36%
TOTAL	100.0%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
IF ON SKIN	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center, doctor, or going for treatment. Contact 1-888-478-0798 for emergency medical treatment information.	

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Harmful if inhaled. Avoid breathing dust, vapor or spray mist. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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 REQUIREMENTS

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

EPA Reg. No. 10163-334



Produced For:
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

BUTTE herbicide is toxic to aquatic organisms. Except when treating rice fields as specified in the label, **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** apply where runoff is likely to occur. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate. **DO NOT** apply when weather conditions favor drift from the area treated. Apply this product only as specified on this label.

PHYSICAL AND CHEMICAL HAZARDS

DO NOT mix or allow contact with oxidizing agents as hazardous chemical reactions may occur.

PRODUCT INFORMATION

BUTTE herbicide is a granular (GR) herbicide formulation for use in California water seeded rice. BUTTE herbicide is applied postflood as a pre and post-emergence herbicide for the selective control of susceptible grass, broadleaf and sedge weeds. BUTTE herbicide is a combination of a HPPD inhibitor (Benzobicyclon) and an ALS inhibitor (Halosulfuron-methyl) and this mixture controls weeds from both foliar and root uptake.

Benzobicyclon, the major component of the formulation, is a pro-herbicide and the formulated product must be applied into flooded fields to allow for conversion to the herbicidal active ingredient. Application to dry soils will provide minimal weed control. BUTTE herbicide can be incorporated into a wide range of weed control programs and has not been shown to exhibit antagonism with any other classes of chemistry.

DIRECTIONS FOR USE

READ ALL DIRECTIONS FOR USE BEFORE USING THIS PRODUCT.

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 State or Tribal 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, is:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

RICE VARIETIES

BUTTE herbicide has been tested on a wide range of rice varieties. Use care when using BUTTE herbicide on newly developed rice varieties until the varietal tolerance to BUTTE herbicide has been determined. Consult UC Agricultural Extension Specialist or County Farm Advisors for more information.

RESISTANCE MANAGEMENT

For resistance management, please note that Butte herbicide contains both a (Group 27) and a (Group 2) herbicide. Any weed population may contain plants naturally resistant to (Group 27) and/or (Group 2) herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Follow appropriate resistance-management strategies.

To delay herbicide resistance consider:

- Avoiding the consecutive use of Butte Herbicide or other target site of action (Group 27) Benzobicyclon or (Group 2) Halosulfuron-methyl 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.

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

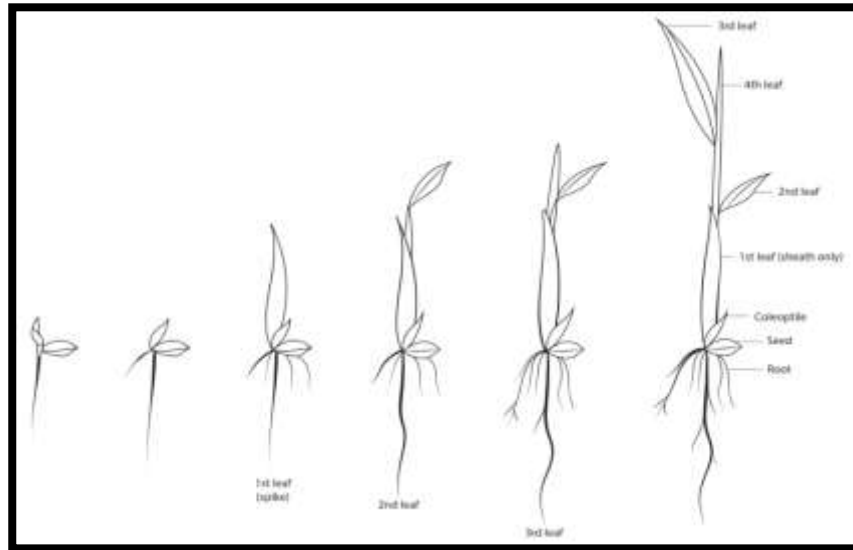
- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

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

REPLANTING INSTRUCTIONS

If initial planting of rice fails to produce a uniform stand, rice may be replanted in fields treated with BUTTE herbicide. **DO NOT** apply a second application of BUTTE herbicide to fields that have been previously treated with BUTTE herbicide.

Diagram 1. Rice Stage Range for Application of BUTTE herbicide



MANDATORY SPRAY DRIFT

Aerial Applications

- DO NOT release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- DO NOT apply when wind speeds exceed 10 miles per hour at the application site.
- DO NOT apply during temperature inversions.

SPRAY DRIFT ADVISORIES

- THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
- BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.
- IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.
- RELEASE HEIGHT - Aircraft
Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- TEMPERATURE AND HUMIDITY
When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

- **TEMPERATURE INVERSIONS**
Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.
- **WIND**
Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

APPLICATION INSTRUCTIONS

CROP	RATE LB/A	WEEDS CONTROLLED
Rice	7.5 to 9.0 lb (0.23 – 0.27 lb ai Benzobicyclon) (0.048 – 0.058 lb ai Halosulfuron-methyl)	Monochoria (<i>Monochoria spp</i>) Ricefield bulrush (<i>Scirpus mucronatus</i>) Smallflower umbrella sedge (<i>Cyperus difformis</i>) Sprangletop (<i>Leptochloa fascicularis</i>) Water hyssop (<i>Bacopa. spp</i>)
CROP	RATE LB/A	WEEDS SUPPRESSED
Rice	7.5 to 9.0 lb (0.23 – 0.27 lb ai Benzobicyclon) (0.048 – 0.058 lb ai Halosulfuron-methyl)	California arrowhead (<i>Sagittaria montevidensis</i>) Ducksalad (<i>Heteranthera limosa</i>) Barnyardgrass (<i>Echinochola crus-galli</i>) Early Watergrass (<i>Echinochloa oryzoides</i>) Late Watergrass /Rice Mimic (<i>Echinochloa phyllopogon</i>)
APPLICATIONS INSTRUCTIONS:		
<ul style="list-style-type: none"> • Apply BUTTE herbicide at day of seeding to 4 true leaf rice (see Diagram 1). • Apply 7.5 - 9.0 lb of BUTTE herbicide (0.23 – 0.27 lb ai Benzobicyclon) and (0.048 – 0.058 lb Halosulfuron-methyl) per acre. • Apply BUTTE postflood as a pre and postemergence herbicide. • Apply BUTTE herbicide by air through properly calibrated equipment at an appropriate release height for best coverage and aircraft safety. • For optimum grass suppression, apply at 0.5 to 2 true leaf stage grass weeds. Application to grasses outside this size range may lead to reduced efficacy. • For suppression of Late Watergrass and Rice Mimic, use the 9 lb. rate. 		
RESTRICTIONS:		
<ul style="list-style-type: none"> • Preharvest Interval (PHI): DO NOT harvest rice that has been treated with BUTTE herbicide within 82 days of application. • Direct application to ditches used to transport irrigation water is prohibited. • DO NOT apply more than 9 lb of BUTTE herbicide (0.27 lb ai Benzobicyclon) and (0.058 lb ai Halosulfuron-methyl) per year. • DO NOT apply more than 9 lb of BUTTE herbicide (0.27 lb ai Benzobicyclon) and (0.058 lb ai Halosulfuron-methyl) in a single application. • DO NOT Make more than 1 application per year. • DO NOT apply where runoff or irrigation water may flow directly onto agricultural land other than rice fields. • DO NOT apply this product through any type of irrigation system. • DO NOT fish or commercially grow fish, shellfish or crustaceans on treated acres during the year of treatment. • DO NOT use on Wild Rice (<i>Zizania sp.</i>). • Apply BUTTE herbicide only in California on flooded rice paddies. • Apply BUTTE herbicide to rice only as specified on this label. DO NOT apply to any other crop or site. • This product is not intended for use in manufacturing or reformulation. • DO NOT apply BUTTE herbicide through ground application. 		
WATER MANAGEMENT GUIDELINES		
Permanent Flood:		
<ul style="list-style-type: none"> • Average water depth at application needs to be a minimum of 4 inches with no bare soil. • For best control maintain permanent flood at a minimum depth of 4 inches for 7 days. • Minimum water hold period for BUTTE herbicide is twenty (20) days. 		

ROTATIONAL CROP RESTRICTIONS

The following rotational intervals must be observed after applying BUTTE herbicide. Rotation intervals below may need to be extended if drought or cool conditions prevail. Gowan Company advises that the end user test this product in order to determine its suitability for such intended use.

TIME INTERVAL BEFORE PLANTING

CROP	MONTHS	EXCEPTIONS
CROPS NOT SPECIFICALLY LISTED	36	
Almonds	36	
Alfalfa	9	
Apples ¹	9	
Barley (winter)	2	
Beans, Dry	0	
Beans, Snap	9	
Blueberry ¹	9	
Broccoli	18	
Cabbage	15	
Canola	15	
Carrot	15	
Cauliflower	18	
Cereal crops, Spring	2	
Clovers	9	
Corn, IR/IMR Field	0	
Corn, Normal Field and IT Field	1	
Corn, Seed	2	
Corn, Sweet and Pop	3	
Cotton	4	
Cucumbers	9	
Eggplant	12	
Forage Grasses	2	
Grapes ¹	9	
Lettuce crops	18	
Melons	9	
Mint	15	
Oats	2	
Onions and Leeks	18	
Pears ¹	9	
Peas	9	
Peas, Field	9	
Peppers	10	
Potatoes	9	
Pumpkins	9	
Proso Millet	2	
Radish	12	

Rice	0	
Rye (winter)	2	
Safflower	18	
Sorghums	2	
Soybeans	9	Where soil pH is less than 7.5 the interval is 5 months
Spinach	24	
Squash	9	
Strawberries	36	
Sugarbeet and Red Beet	24	
Sunflowers	18	
Tomato	8	
Tree Nuts (excluding Almonds) ¹	9	
Wheat (winter)	2	

¹ After a BUTTE application, the soil must be plowed and cross disked

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Store in a cool place.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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 empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL CHEMTREC® (800) 424-9300.
For other product information, contact Gowan Company or see Material Safety Data Sheet.**

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. To the extent consistent with applicable law, 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 CONSISTENT 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 CONSISTENT 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.

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