

BUCKLE[®]

MICROACTIV[™]

HERBICIDE

Granular selective herbicide for spring preplant application to control wild oats and pigeongrass in Barley and Green and Field Dried Peas; and for fall preplant application to control wild oats and pigeongrass in Barley, Durum Wheat, and Winter Wheat; and for fall preplant application to suppress downy brome in Winter Wheat.

For use in Colorado, Idaho, Kansas, Minnesota, Montana, Nebraska, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

ACTIVE INGREDIENTS:	% By Wt.
Triallate, S-(2,3,3-Trichloroallyl) diisopropyl-thiocarbamate.....	10.0%
Trifluralin, α , α , α , trifluoro-2,6-dinitro-N,N-dipropyl-p-toluidine.....	3.0%
OTHER INGREDIENTS:	<u>87.0%</u>
TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

Read the entire label before using this product. Use only according to label instructions. Read "NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS" before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. GOWAN COMPANY DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING.

FIRST AID	
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing	<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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or physician, or going for treatment. In case of an emergency 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, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Loaders, applicators and other handlers must wear: Long-sleeved shirt and long pants, shoes plus socks.

In addition, loaders must wear: A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter.

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.

USER SAFETY RECOMMENDATIONS
<p>Users should:</p> <ul style="list-style-type: none"> 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. 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.

NET CONTENTS ____ POUNDS

ENVIRONMENTAL HAZARDS

This chemical is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. Do not apply in a manner which will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. Do not apply directly to water, or to areas where water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

Groundwater Advisory

Triallate has a degradation product TCPSA (trichloropropene sulfonic acid) with properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Surface Water Advisory

Under some conditions, the triallate degradate TCPSA may have a high potential for runoff into surface water (primarily via dissolution in runoff water). These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain surface water.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Gowan Company Supplemental Labeling.

Do not allow this product to drift. 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 others to enter the treated area (except those persons involved in the incorporation) until the incorporation is complete following application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves, such as nitrile rubber, neoprene rubber or polyethylene.

For more options, follow the instructions for category A (dry and water-based formulations) on an EPA chemical-resistant category selection chart.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for Agricultural pesticides [40 CFR 170.24(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

GENERAL INFORMATION

If you have any questions concerning this label or the proper application or use of Buckle Microactiv Herbicide, contact your local Gowan Company Sales Representative.

This product is for spring application prior to planting barley or peas and for fall application prior to planting barley, durum wheat or winter wheat to control wild oats (*Avena fatua*), green foxtail (*Setaria viridis*) and yellow foxtail (*Setaria glauca*) and for fall application prior to planting winter wheat to suppress downy brome (*Bromus tectorum*). Green and yellow foxtail are commonly referred to as pigeongrass.

Application equipment must be properly calibrated: application of too much herbicide may injure the crop; application of too little may result in poor weed control. Recommended rates should be followed in order to:

1. Avoid crop injury
2. Avoid herbicide residues at harvest
3. Control weeds

Use of this product not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

GENERAL PRECAUTIONS AND RESTRICTIONS

Application to a field which is wet, lumpy, rough or ridged will result in reduced weed control and promote crop thinning. Incorporation must be completed within 24 hours after application and before germination of the weeds. If weeds have emerged prior to treating and/or planting, they must be controlled. All deep tillage by cultivators or double disc implements must be completed prior to application. Do not plow following application of this product.

To minimize stress and allow for uniform germination, seeding depth must be less than 2 inches. Delay spring planting of spring wheat until the average soil temperature at the 2-inch depth is 45°F or greater.

When using this product, a strip should be left untreated for proof of results. Weed control may be evaluated also by removing a surface inch or two of soil at the time of germination to inspect the number of weed seedlings killed before emergence.

Weeds are usually killed before emergence, but occasionally and particularly under dry conditions, plants may reach the 3-to 4-leaf stage before they die.

Under conditions of prolonged high temperature at the time of germination or extreme drought in the spring, this product may not maintain the usual high standard of weed control.

ATTENTION

DELAYED EMERGENCE, STAND REDUCTION, STUNTING AND YIELD LOSS MAY RESULT DUE TO COLD OR WET CONDITIONS, IRRIGATION DURING GERMINATION OR EMERGENCE, DEEP PLANTING, SOIL CRUSTING, DISEASE, INSECTS, POOR SEED QUALITY, OR SELECTION OF A VARIETY GENETICALLY SUSCEPTIBLE TO STRESS. THESE ARE CONDITIONS BEYOND THE CONTROL OF GOWAN COMPANY, AND THE GROWER SHOULD CONSULT THE STATE UNIVERSITY EXTENSION SPECIALIST OR SEED PRODUCER OR SUPPLIER FOR LOCAL VARIETAL INFORMATION AND RECOMMENDED TILLAGE AND PLANTING PRACTICES AND DATES.

NOTE: Slight stand reductions do not normally affect yield.

NOTE: Do not graze livestock on treated crops.

Application is limited to one per growing season and must not exceed 15 lbs. of this product per acre.

Do not apply this product prior to durum wheat on soil that has been planted to soybeans or sugarbeets and treated with trifluralin the previous year.

Do not rotate to crops other than winter wheat, spring and durum wheat, triticale, barley, peas (green, field dried, chickpeas, garbanzo beans), and lentils for 12 months after a Buckle Microactiv Herbicide application.

Sugarbeets, red beets, or spinach should not be planted for 14 months after application of this product.

Sorghum, proso millet, corn or oats should not be planted for 16 months after application of this product.

If less than 20 inches of total water were used to produce the crop, do not plant any of the above-mentioned crops for 20 months after application of this product. Cool, wet conditions during the early stages of growth may increase the possibility of injury to sorghum.

Do not use this product on soils containing more than 10 percent organic matter or on muck soils.

Do not apply this product on eroded clay hillsides.

Do not apply this product to soils which are subject to prolonged periods of flooding.

Use in any manner not consistent with label directions can result in serious injury to the crop.

Do not use Buckle Microactiv Herbicide preplant to winter wheat seeded with double-disc press drills.

APPLICATION EQUIPMENT AND TECHNIQUES HOW TO APPLY AND CALIBRATE EQUIPMENT

This product must be applied through a specially designed ground applicator capable of applying small quantities of granules evenly.

Do not apply aurally.

It is important that the applicator be calibrated properly to deliver the desired amount of this product to avoid applying too little, or too much, material. To give even distribution, scatter plates (similar to those used for applying granules in a band) must be attached to each delivery tube or outlet in such a manner to give overall coverage. To calibrate, attach a collector pan, or strong, vented plastic bag, over each spreader plate or delivery tube. Operate over normal terrain to be treated at 4 to 5 miles per hour. Collect the granules from all outputs after covering the desired distance.

For example, if a 14-foot applicator is being used, stake off a distance of 324 feet in the field to be treated (distance equal to 1/10 acre treated). After attaching a bag, or collection pan, to each outlet, collect the granules while driving the desired distance. Check to see that each outlet disperses the same amount of granules. Combine all samples and weigh. For the above set of conditions, the quantity of granules that should be collected for the following recommended rates for broadcast treatment are:

APPLICATION RATES PER ACRE

	<u>10 lbs.</u>	<u>12.5 lbs.</u>
Proper amount to be collected	1.0 lbs.	1.25 lbs.

If more or less than the desired quantity is collected, adjust opening accordingly and again collect the granules while driving the staked-off distance. Continue this procedure until the proper amount is delivered.

FIELD PREPARATION

Before applying this product, be sure the soil is in good working condition. All deep tillage by cultivation, or double disc implements, must be completed prior to application of this product. If stubble ground is being treated, one or two passes with a field cultivator may be required before application and incorporation.

INCORPORATION DIRECTIONS

Fall Applications

When incorporating with a single pass in the fall, a second incorporation must be performed in the spring during seedbed preparation. If no spring work is anticipated, then both incorporations should be done in the fall.

Spring Applications

Apply granules and incorporate with equipment such as a culti-harrow or duckfoot cultivator. A second incorporation at right angles should provide best results.

General Incorporation Guidelines

For proper incorporation of this product, set incorporation implement to work the soil no deeper than 3 or 4 inches. Do not use disc implements for incorporation.

On summer fallow ground which is loose and free of lumps and trash, incorporate this product using equipment similar to a field cultivator, culti-harrow or a duckfoot with a rod weeder attachment.

For applications to fields of standing stubble, fields may be worked once or twice with a field cultivator or chisel plow. Apply granules and incorporate with a field cultivator or culti-harrow.

If soil must be ridged after incorporating to prevent soil erosion by high winds, the depth of ridging should be kept to a minimum.

In preparing the herbicide-treated area for seeding in the spring, care must be taken to avoid working the soil any deeper than fall tillage.

CROPS AND APPLICATION RATES

Barley – Durum Wheat – Green and Field Dry Peas – Winter Wheat

Apply Buckle Microactiv Herbicide in the spring prior to planting barley or peas, or in the fall prior to planting barley, durum wheat or winter wheat at the rates listed in the following Application Rate Table.

<u>Application Time</u>	<u>Barley/Peas</u>	<u>Durum Wheat</u>	<u>Winter * Wheat</u>
Spring	10-12.5 lb/A	-	-
Fall	10-12.5 lb/A	10-12.5 lb/A	12.5-15 lb/A

In the fall, apply within 3 weeks of normal freeze up or until snow cover occurs.

Apply higher rates on heavy weed infestations within the specified range.

* Do not use prior to conventional seeding with double-disc press drills. Only recommended for use with no-till or deep furrow drills.

STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Keep bag closed to prevent spills and contamination.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Completely empty sack into transfer or application equipment. Offer for recycling if available, or dispose of empty sack 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 your distributor or see the 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 permitted by 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, BUYER'S OR USER'S EXCLUSIVE REMEDY AND 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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Chemtec® is a registered trademark of American Chemistry Council, Inc.

01-R0117EPA

SUPPLEMENTAL LABELING

Buckle[®] Microactiv Herbicide

EPA Reg. No. 10163-289

GRANULAR SELECTIVE HERBICIDE FOR SPRING PREPLANT APPLICATION TO CONTROL WILD OATS AND PIGEONGRASS IN SPRING WHEAT.

READ AND FOLLOW THE ENTIRE LABEL FOR BUCKLE[®] MICROACTIV HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

When using Buckle Microactiv Herbicide as permitted according to this supplemental labeling, read and follow all applicable directions, restrictions, and precautions on the label booklet provided with the pesticide container and on this supplemental labeling. This supplemental labeling must be in the possession of the user at the time of pesticide application.

FOR USE WITHIN NORTH DAKOTA EXCLUDING THE FOLLOWING COUNTIES: CASS, GRAND FORKS, PEMBINA, RICHLAND, TRAILL, AND WALSH.

THIS PRODUCT MAY ALSO BE USED IN THE FOLLOWING SOUTH DAKOTA COUNTIES: CORSON, DEWEY, HARDING, PERKINS, AND ZIEBACH.

KEEP OUT OF REACH OF CHILDREN CAUTION

In case of a medical emergency involving this product, call toll free 1-888-487-0798.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with the labeling.

This label must be in possession of the user at the time of herbicide application.

Apply Buckle Microactiv Herbicide at a rate of 10 pounds per acre in the spring prior to planting Spring Wheat. Application is limited to one per growing season and must not exceed 10 lbs. of this product per acre.

Incorporate spring Buckle Microactiv Herbicide applications within 24 hours with a field cultivator with harrow attachment. A second incorporation at a right angle to the first will provide the best results. Delay the second incorporation or spring wheat planting for a minimum of 5 days following the first incorporation. Do not set tillage equipment to incorporate soil deeper than the first incorporation.

Do not apply Buckle Microactiv Herbicide for spring wheat on soil that has been treated with 0.5 lbs ai/acre or greater of trifluralin, or other dinitroaniline herbicide, the previous year.

NOTE: Spring wheat varieties identified as susceptible to early injury from preplant applications of Buckle Microactiv Herbicide include: Alex, Amidon, Butte 86, Ellar, Era, Erik, Lew and Newana.

To minimize stress and allow for uniform germination, a seeding depth of no more than 1.5 to 2 inches is recommended. Delay spring planting of spring wheat until the average soil temperature at the 2-inch depth is 45 degrees F or greater.

DO NOT APPLY BUCKLE MICROACTIV HERBICIDE TO HILLTOPS.

Seed treatments are recommended to reduce potential stress to germinating seedlings from disease or insects.

Do not use on fields if the field is or will be irrigated in the current growing season.

NOTE: Slight stand reductions do not normally affect yield.

DO NOT APPLY BUCKLE MICROACTIV HERBICIDE TO A STRIP OR AREA IN THE FIELD THAT WILL SERVE AS AN UNTREATED COMPARISON FOR WEED CONTROL AND CROP TOLERANCE.

Read the "NOTICE OF CONDITIONS OF SALE AND WARRANTY LIABILITY LIMITATIONS" in the label for Buckle Microactiv Herbicide before using this product. Those terms apply to this supplemental labeling and if those terms are not acceptable, return the product unopened at once.

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SUPPLEMENTAL LABELING

Buckle® Microactiv Herbicide

EPA Reg. No. 10163-289

GRANULAR SELECTIVE HERBICIDE FOR FALL PREPLANT APPLICATION TO CONTROL WILD OATS AND PIGEONGRASS IN SPRING WHEAT.

READ AND FOLLOW THE ENTIRE LABEL FOR BUCKLE® MICROACTIV HERBICIDE BEFORE PROCEEDING WITH THE USE AND DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

When using Buckle Microactiv Herbicide as permitted according to this supplemental labeling, read and follow all applicable directions, restrictions, and precautions on the label booklet provided with the pesticide container and on this supplemental labeling. This supplemental labeling must be in the possession of the user at the time of pesticide application.

FOR USE ONLY WITHIN THE FOLLOWING COUNTIES IN NORTH AND SOUTH DAKOTA:

North Dakota:

Adams, Billings, Bottineau, Bowman, Burleigh, Burke, Divide, Dunn, Emmons, Grant, Golden Valley, Hettinger, Kidder, McHenry, McKenzie, McLean, Mercer, Morton, Mountrail, Oliver, Renville, Sheridan, Sioux, Slope, Stark, Ward, and Williams.

South Dakota:

Corson, Dewey, Harding, Perkins, and Ziebach.

KEEP OUT OF REACH OF CHILDREN CAUTION

In case of a medical emergency involving this product, call toll free 1-888-487-0798.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with the labeling.

This label must be in possession of the user at the time of herbicide application.

Apply Buckle Microactiv Herbicide at a rate of 10 pounds per acre in the fall prior to spring planting of Spring Wheat. Average soil temperature at the 2-inch depth must be 40° F or less. Application is limited to one per growing season and must not exceed 10 lbs. of this product per acre.

Incorporate fall Buckle Microactiv Herbicide applications within 24 hours with a field cultivator. For the best results a second incorporation should be done in the spring at a right angle with a field cultivator with harrow attachment. If no spring tillage is anticipated, both incorporations should be done in the fall with a minimum of 5 days between first and second incorporations. For best results, care must be taken to avoid working the soil deeper than the first tillage operation.

Do not fall-apply Buckle Microactiv Herbicide for spring wheat on soil that has been treated with 0.5 lbs ai/acre or greater of trifluralin, or other dinitroaniline herbicide, during that calendar year.

NOTE: Spring wheat varieties identified as susceptible to early injury from preplant applications of Buckle Microactiv Herbicide include: Alex, Amidon, Butte 86, Ellar, Era, Erik, Lew and Newana.

To minimize stress and allow for uniform germination, a seeding depth of no more than 1.5 to 2 inches is recommended. Delaying spring planting until soil temperatures have reached 45°F at the two inch depth will reduce the potential for crop injury.

DO NOT APPLY TO HILLTOPS.

Seed treatments are recommended to reduce potential stress to germinating seedlings from disease or insects.

Do not use on fields if the field will be irrigated during the spring wheat growing season.

Note: Slight stand reductions do not normally affect yield.

DO NOT APPLY BUCKLE MICROACTIV HERBICIDE TO A STRIP OR AREA IN THE FIELD THAT WILL SERVE AS AN UNTREATED COMPARISON FOR WEED CONTROL AND CROP TOLERANCE.

Read the "NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS" in the label for Buckle Microactiv Herbicide before using this product. Those terms apply to this supplemental labeling and if those terms are not acceptable, return the product unopened at once.

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