

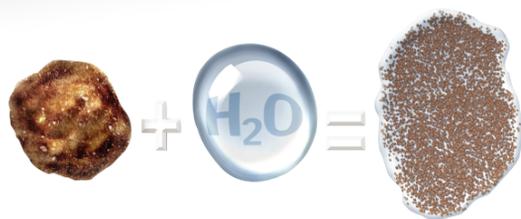
CARBARYL	GROUP	1A	INSECTICIDE
BIFENTHRIN	GROUP	3A	INSECTICIDE

The 
Andersons[®]

TURF PRODUCTS

DUOCIDE[®]

INSECT CONTROL



**Dispersing Granule
Technology**

ACTIVE INGREDIENTS:
Carbaryl (1-naphthyl N-methylcarbamate)..... 2.300%
Bifenthrin* 0.058%
OTHER INGREDIENTS: 97.642%
Total 100.000%
*Cis isomers 97% minimum, trans isomers 3% maximum
CAS No. 82657-04-6
U.S. Patent #7,867,507
EPA Reg. No. 9198-235
EPA Est. No. 9198-OH-1M, 9198-AL-001A
Underlined letter is first letter used in run code.

For control of selected surface and subsurface pests on turfgrass sites including residential lawns, parks and athletic fields and control of pests in and around flower beds, ornamental plantings and around buildings. Not for use on golf courses and sod farms.
• Ideal for control of Adult Mole Crickets
• Effective for curative treatment of white grubs
• Effective on difficult to control southern chinch bugs

KEEP OUT OF REACH OF CHILDREN
CAUTION
SEE BACK PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS

COVERS UP TO 9,000 SQ. FT.
NET WT. 18.00 LBS (8.16 KG)

THE ANDERSONS TURF PRODUCTS DUOCIDE® INSECT CONTROL

KEEP OUT OF REACH OF CHILDREN CAUTION PRECAUTIONARY STATEMENTS

FIRST AID

Carbaryl is an N-Methyl Carbamate Insecticide.

If in eyes: 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: 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 swallowed: Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If inhaled: 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 treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-757-8951 for emergency medical treatment information.

ANTIDOTE STATEMENT: ATROPINE SULFATE IS HIGHLY EFFECTIVE AS AN ANTIDOTE. See NOTE TO PHYSICIAN.

Note to Physician: Carbaryl is an N-methyl carbamate that inhibits cholinesterase. Atropine is antidotal. Do not use 2-PAM (pyridine-2-aldoxime methiodide), opiates or cholinesterase inhibiting drugs. Probable mucosal damage may contraindicate the use of gastric lavage.

This product is a pyrethroid. If large amounts have been ingested, milk cream and other digestible fats and oils may increase absorption and so should be avoided.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Harmful if absorbed through the skin, swallowed, or inhaled. Avoid breathing dust. Avoid contact with eyes, skin or clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet. Wear long sleeved shirt and long pants, socks, shoes and chemical resistant gloves. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Care should be used when applying to avoid fish and reptile pets in/around ornamental ponds. Remove contaminated clothing before reuse.

USER SAFETY REQUIREMENTS: 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

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Shoes plus socks.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from area treated. Drift and run-off may be hazardous to aquatic organisms in water adjacent to treated areas. To protect the environment, do not allow

pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 48 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street, back onto the treated area of the lawn or garden will help to prevent runoff to water bodies or drainage systems.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to use of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The Worker Protection Standard applies when this product is used to produce agricultural plants on farms, forests, nurseries, or green houses. Do not enter or allow others to enter the treated area until dusts have settled. In addition, if directions for use require watering-in, do not enter or allow others to enter the treated area (except those involved in the watering-in) until the watering-in is completed and the area has dried.

DIRECTIONS FOR USE

READ ALL DIRECTIONS PRIOR TO APPLICATION OF THE PRODUCT

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

Apply this product directly to the lawn or garden area. Water treated area as directed on the label.

Product must be watered in immediately after application to lawns.

Treat surfaces to ensure thorough coverage but avoid runoff.

For applications at rates above or below 0.25 lbs bifenthrin/A (435 lbs product/A), users must water the treated immediately after application.

All outdoor applications, unless permitted elsewhere on this label, must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- Applications to soil, lawn, turf, or vegetation;
- Perimeter band treatments of 6 ft wide or less from the base of a man-made structure to pervious surfaces (e.g., soil, mulch, or lawn);
- Applications around potential exterior pest entry points into man-made structures such as doorways and windows, when limited to a band not to exceed one inch;
- Applications to vertical surfaces directly above pervious surfaces, such as bare soil, lawn, turf, mulch or other vegetation, that do not drain into ditches, storm drains, gutters, or surface waters.

Spot treatments must not exceed two square feet in size (for example, 2 ft by 1 ft or 4 ft by 0.5 ft).

ENDANGERED AND THREATENED SPECIES PROTECTION REQUIREMENTS:

Before using this product, you must obtain any applicable Endangered Species Protection Bulletins ("Bulletins") within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at <https://www.epa.gov/pesticides/bulletins>. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s). For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.

REPORTING ECOLOGICAL INCIDENTS:

For guidance on reporting ecological incidents, including death, injury, or harm to plants and animals, including bees and other non-target insects, see EPA's Pesticide Incident Reporting website: <https://www.epa.gov/pesticide-incidents> or call 1-800-757-8951.

RESISTANCE MANAGEMENT:

For resistance management, please note that The Andersons Turf Products DuoCide Insect Control contains both a Group 1A and Group 3A insecticides. Any insect/mites population may contain individuals naturally resistant to The Andersons Turf Products DuoCide Insect Control and other Group 1A or Group 3A insecticides. The resistant individuals may dominate the insect/mites population if these insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of The Andersons Turf Products DuoCide Insect Control or other Group 1A and Group 3A insecticides within a growing season, or among growing seasons, with different groups that control the same pests. Avoid application of more than 4 times of The Andersons Turf Products DuoCide Insect Control or other insecticides in the same group in a season
- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.

- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.

- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).

- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.

- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.

- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.

- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.

- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

- For further information or to report suspected resistance contact The Andersons at 1-800-757-8951

RESTRICTIONS

- In New York State, the product may NOT be applied to any grass or turf areas within 100 feet of a water body (lake, pond, river, stream, wetland or drainage ditch). In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

- Do not apply more than 435 lbs. of this product (10 lbs. carbaryl, 0.25 lbs bifenthrin active ingredient per acre per year) for turf grass.

- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams or ephemeral streams when water is present, wetlands or natural ponds, estuaries, and commercial fish farm ponds).

- Do not make applications during rain.

- Do not apply the product into fish pools, ponds, streams, or lakes. Do not apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.

- Do not allow the product to enter any drain during or after application.

- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and crevice treatment.

- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.

- Do not apply or irrigate to the point of runoff.

- Do not apply when the wind speed is greater than 15 mph.

- 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.

- Not for use on golf courses, sod farms, nurseries, commercial greenhouses or grass grown for seed.

- Do not apply more than 4 times per year to lawn. The minimum reapplication interval to lawns is seven days.

- For outdoor use only.

- Aerial application is prohibited.

TURFGRASS PEST CONTROL

Turfgrass Information

This product controls surface and subsurface feeding pests on turfgrass sites (lawns, sod, turf areas) such as, but not limited to: residential and commercial lawns, grounds or lawns around business and office complexes, shopping centers, multi-family and residential apartment complexes, airports, military and other institutions, cemeteries, parks and picnic areas, playgrounds, schools, athletic fields.

The active ingredients in this product also provide both curative and residual control of listed surface feeding pests.

The regional differences in pest species pressure, timing for optimal control, pest monitoring methods and other particulars for your location will vary, so consult your cooperative extension service for details. Most states have taxpayer-supported internet web sites and other services to provide this very helpful information. Please use and continue to support your local extension services.

Application Directions

Apply uniformly over the treatment area with either a broadcast or drop type spreader, avoiding spreaders which will apply product in narrow, concentrated bands. Apply only the specified amount in the following table. Calibrate the spreader before use and check periodically to ensure the equipment is working properly. Avoid overlaps that will increase rates above those recommended. Failure to follow the Directions for Use and all precautions may result in grass injury or poor pest control.

For optimal effectiveness, minimize thatch since heavy thatch will prevent the insecticide from penetrating to the area where insects are feeding. Although not dependent on immediate irrigation for activation, water must carry this material through the thatch. In conditions of drought it is recommended to water in this product.

Recent research has shown that well-maintained turf is an effective environmental buffer that prevents pollutants from entering our natural water bodies. To help protect these natural resources, please avoid applying product to sidewalks, driveways, roadways, and other impervious surfaces which are adjacent to storm drains. Sweep any misplaced granules back onto the area you are treating immediately after application, since storm drains often empty directly to nearby waterways.

Timing

Surface pests (leaf, crown and thatch inhabiting): Treat when pests or turf damage symptoms first appear, or when pests are detected by local site monitoring. Best results will occur if the treated area is thoroughly irrigated with water after application. In conditions of drought, it is recommended to water in this product taking care to minimize runoff.

Subsurface pests (soil inhabiting): For best preventative treatment, apply 10 days to 2 weeks after egg laying activity. As a curative treatment, apply when turf damage is first noted. Local site monitoring is recommended to determine optimal time of application. Contact your local State Extension Specialists for more specific information regarding the timing of applications, and for advice on how and when to monitor pest activity at your location. Some pests may have either single or multiple generations per year, depending on species, weather, and locale.

For best results, irrigate treated areas soon after application, enough to thoroughly wet the underlying soil; this washes the active ingredients down below the turf and thatch, and it encourages the subsurface pests to move upward in the soil profile where they will come in contact with the active ingredients. For best pest control and turf culture, minimize thatch buildup to no more than 0.5 in., using mechanical removal methods as needed.

Do not apply more than 435 lbs. of product per acre (0.25 lb. bifenthrin, 10 lbs. carbaryl active ingredient per acre) per year on all turf grass sites.

SEE APPLICATION RATES TABLE ON THE RIGHT

NUISANCE PEST CONTROL IN AND AROUND FLOWER BEDS AND ORNAMENTAL PLANTINGS AND AROUND BUILDINGS.

Will only kill pests present at the time of application. Pest must be directly contacted to be effective.

Kills Ants (except harvester ants, pharaoh ants and carpenter ants), Armyworms, Centipedes, Crickets, Cutworms, Earwigs, Firebrats, Silverfish, Fleas, Millipedes, Sowbugs: Apply granules uniformly in a 6 foot band around the building at the rate of 2-4 lbs. per 1,000 square feet to shrub and flower beds, foundations, ornamental plantings, and lawn or soil areas immediately adjacent to the building. Treated area must be watered in immediately after application. Repeat treatments as needed up to 2 times per year, but no more than once every seven days. Do not exceed 4 lb ai (carbaryl)/ac/year (4 lbs of this product per 1,000 sq. ft.)

APPLICATION RATES

Will only kill pests present at the time of application. Pest must be directly contacted to be effective.

Pest	Amount of Product
Armyworms (larvae of Armyworm, Fall Armyworm, Lawn Armyworm, and striped Grassworm), Cutworms (larvae of Black Cutworm, and Bronze Cutworm), Sod Webworms (larvae of Bluegrass Webworm, Larger Sod Webworm, Western Lawn Moth Cranberry Girdler, Tropical Sod Webworm, and Burrowing Sod Webworm)	87 lbs./acre (2 lb./1,000 sq. ft.)
Annual Bluegrass Weevil (<i>Hyperodes</i>) (Adult), Adults of Bluegrass Billbug, Hunting Billbug, Phoenician Billbug and Denver Billbug, Black Turfgrass Atanius (Adult), Mealybugs, Leafhoppers, Chinch Bugs (nymphs and adults of Hairy Chinch Bug, Southern Chinch Bug, and Buffalo Grass Chinch Bug), Chiggers, Crickets, Darkling Ground Beetles, Earwigs, Essex Skipper, Fire Brats, Grasshoppers, Silverfish, Spittlebugs, Springtails	87-174 lb./acre (2-4 lb./1,000 sq. ft.)
Ants, Centipedes, Fleas (Adult), Flea (Larvae), Millipedes, Ticks, Deer Ticks, American Dog Ticks, European Crane Fly, Imported Fire Ant (Adults), Mole Cricket (Adult), Mole Crickets (nymphs and adults of Tawny, Southern, Shortwinged, West Indian (Changa), Oriental (formerly African) and Native (northern) Mole crickets)	174 - 348 lb./acre (4-8 lb./1,000 sq. ft.)
White Grubs (larvae of Japanese Beetle, European Chafer, Northern Masked Chafer, Southern Masked Chafer, Oriental Beetle, Asiatic Garden Beetle, May/June beetle (<i>Phyllophaga</i> spp.), Bluegrass billbug, Hunting Billbug, Phoenician Billbug, Denver (Rocky Mountain) Billbug, Green June beetle, Black Turfgrass atanius, and Aphodius) and Annual Bluegrass weevil (<i>Hyperodes weevil</i>) and European Crane fly larvae	preventative: 87-174 lb./acre (2-4 lb./1,000 sq. ft.) curative: 174 - 348 lb./acre (4-8 lb./1,000 sq. ft.)
Pillbugs (Sowbugs)	348 lb./acre (8 lb./1,000 sq. ft.)

SPREADER MODEL	LOW RATE	MEDIUM RATE	HIGH RATE
	2 lbs./1,000 sq. ft.	4 lbs./1,000 sq. ft.	8 lbs./1,000 sq. ft.
The Andersons Pacer Pro	8	11	15
The Andersons LCO-1000	1 1/2	M	Q
The Andersons Yard Star Z150	11 1/2	15	19
Agri-Fab Broadcast	2 1/2	4 1/2	7 1/2
Brinly 20 Series Push Broadcast	11 1/2	15	19
Chapin Broadcast	11 1/2	15	19
Earthway Broadcast	11 1/2	15	19
Echo Broadcast	2 3/4	5	8
Lesco Broadcast	10 1/2	12 1/2	16 1/2
Scotts Broadcast*	2 3/4	5	8

*Includes EdgeGuard, Elite, Standard, Basic, LawnPro & Speedy Green 1000 - 3000

Note: These spreader settings were established using standard equipment available from the spreader manufacturer at swath widths and speeds typically used within the industry. It is recommended that all spreader equipment be calibrated at the time of application to achieve the desired application rate.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep out of reach of children and animals. Store in original container only. Store in cool, dry place and avoid excess heat.

PESTICIDE DISPOSAL: Wastes resulting from the use of the product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then 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.

IMPORTANT: READ BEFORE USE: Read the entire Directions for Use and the Warranty Disclaimer and Limitation of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or Buyer accepts the following Warranty Disclaimer and Limitation of Liability:

WARRANTY DISCLAIMER and LIMITATION OF LIABILITY: Manufacturer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions. Manufacturer makes NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. To the extent consistent with applicable law, it is Manufacturer's intent to LIMIT ANY LIABILITY FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL ECONOMIC DAMAGES to refund of purchase price or replacement of product, at Buyer's choice. To the extent consistent with applicable law, Manufacturer DISCLAIMS ANY LIABILITY FOR COMPENSATORY OR OTHER DAMAGES ARISING OUT OF ANY USE CONTRARY TO LABEL DIRECTIONS. Use contrary to label directions is not permitted.

LEGAL RIGHTS: THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS; YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE/JURISDICTION TO STATE/JURISDICTION.

Product of U.S.A.

The Andersons

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