



IPM-1295

# General Pesticide Information



Alabama Pest Management Handbook for 2020

## FEDERAL RESTRICTED USE PESTICIDES

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The EPA has updated its list of restricted use pesticides. The current updated copy can be found at the EPA Restricted Use Pesticide website: <http://epa.gov/opprd001/rup>.

### ALABAMA 24(C) LABELS

A 24(C) registration is a federal registration that has been granted to the state of Alabama for a special local need. This registration is valid only in the state of Alabama; it is in effect through December 2018.

Alabama Registration Number	Product Name	Use	Company Name
<u>AL-850008</u>	AQUATHOL K AQUATIC HERBICIDE	Crop/site: irrigation ditches, canals, lakes, and ponds Pest: Broad range aquatic weeds	UPL NA, Inc.
AL-870002	DIMILIN 25W INSECT GROWTH REGULATOR	Crop: Christmas trees. Pest: Nantucket pine tipmoth	Macdermid Agricultural Solutions, Inc.
AL-930004	DIMILIN 25W INSECT GROWTH REGULATOR	Crop: aquatic sites Pests: mosquitos and midges	Macdermid Agricultural Solutions, Inc.
AL-030003	REFLEX HERBICIDE	Crop: pine seedlings Pest: pre-emergent	Syngenta Crop Protection, LLC
AL-040001	CURFEW SOIL FUMIGANT	Crop: turf grass Pest: nematodes and mole crickets	Dow Agrosiences, LLC
AL-060006	PERMETHRIN INSECTICIDE	Crop: conifer nurseries Pest: regeneration weevils	Loveland Products, Inc.
AL-070005	ZORO MITICIDE/ INSECTICIDE	Crop: cotton Pest: spider mites	Cheminova, Inc.
AL-080001	BRIGADE 2 EC INSECTICIDE/ MITICIDE	Crop: agricultural or commercial use only conifer seed orchards Pest: cone worm, seed bugs, seed worms	FMC Corp Agricultural Products Group
AL-100001	ARSENAL POWERLINE HERBICIDE	Crop: areas that may be grazed or cut for hay. Pest: congongrass	BASF Corp.
AL-100002	VALOR SX HERBICIDE	Crop: cotton Pest: pre-plant burndown control of resistant palmer amaranth and other weeds	Valent USA Corp
AL-100003	DUAL MAGNUM	Crop: sesame Pest: weeds	Syngenta Crop Protection, LLC
AL-120002	PROFUME FUMIGANT	Crop/site: fumigation of non-edible commodities and use of quarantine/regulatory treatment schedules	Douglas Products & Packaging Co.
AL-120003	GRAMOXONE SL 2.0 HERBICIDE	Crop: peanuts Pest: palmer amaranth	Syngenta Crop Protection, LLC
AL-120004	MILESTONE HERBICIDE	Crop/site: for control of wildling pines and certain hardwood trees in forest site preparation areas; for mid-rotation understory brush and weed control in pine stands and grazed areas	Dow Agrosiences, LLC
<u>AL-120005</u>	AVIPEL LIQUID SEED TREATMENT	Crops: field and sweet corn seed Pest: black Birds	Arkion Life Sciences, LLC
<u>AL-120006</u>	AVIPEL HOPPER BOX (DRY) CORN SEED TREATMENT	Crops: field and sweet corn seed Pest: black birds	Arkion Life Sciences, LLC

Alabama Registration Number	Product Name	Use	Company Name
<u>AL-120007</u>	MILESTONE HERBICIDE	Crop/Site: newly planted longleaf pine plantations Pest: blackberry (briars), vines, and susceptible broadleaf weeds	Dow Agrosiences, LLC
<u>AL-130001</u>	NATRIX MOLLUSCICIDE	Crop/Site: aquatic uses in Baldwin and Mobile Counties only Pest: non-native apple snail	SePRO Corporation
<u>AL-130002</u>	KARMEX DF HERBICIDE	Crop/site: commercial catfish farm production ponds Pest: algae	ADAMA
<u>AL-130003</u>	DIREX 4L HERBICIDE	Crop/site: commercial catfish farm production ponds Pest: algae	ADAMA
<u>AL-140001</u>	MICORA FUNGICIDE	Crop: greenhouse basil Pest: downy mildew	Syngenta Crop Protection, LLC
<u>AL-160001</u>	TRIBUNE HERBICIDE	Crop: aquatic areas Pest: hydrilla	Syngenta Crop Protection, LLC
<u>AL-170002</u>	ENGENIA HERBICIDE	Crop/site: genetically modified dicamba tolerant cotton and soybean Pest: weed control	BASF Corporation
<u>AL-170003</u>	ENLIST DUO HERBICIDE	Crop/site: genetically modified dicamba tolerant cotton and soybean Pest: weed control	Dow AgroSciences, LLC
<u>AL-170004</u>	FEXAPAN HERBICIDE	Crop/site: genetically modified dicamba tolerant cotton and soybean	E.I. Dupont De Nemours & Co.
<u>AL-170005</u>	GF-3335 HERBICIDE	Crop/site: genetically modified dicamba tolerant cotton and soybean	Dow AgroSciences, LLC
<u>AL-170006</u>	STRONGARM HERBICIDE	Crop: peanut Pest: tropical spiderwort	Dow AgroSciences, LLC
<u>AL-170007</u>	ENLIST ONE HERBICIDE	Crop/site: genetically modified dicamba tolerant cotton and soybean. Pest: weed control	Dow AgroScience,s LLC
<u>AL-180001</u>	KNACK INSECT GROWTH REGULATOR	Crop: cotton Pest: whitefly	Valent USA Corp.
<u>AL-190001</u>	TAVIUM PLUS VAPORGRIP TECHNOLOGY HERBICIDE	Crop/site: genetically modified dicamba tolerant cotton and soybean Pest: weed control	<u>Syngenta Crop Protection, LLC</u>
<u>AL-190002</u>	XTENDIMAX WITH VAPORGRIP TECHNOLOGY HERBICIDE	Crop/site: genetically modified dicamba tolerant cotton and soybean Pest: weed control	<u>Bayer CropSciences</u>

## MAINTAINING WATER QUALITY

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Clean water is of great concern for all Americans. Almost all potable water supplies come from surface or ground water. Surface water is derived from above-ground sources such as lakes, streams, ponds, or other impounded bodies. Ground water is found in zones beneath the earth's surface, which are called aquifers. Aquifers are formations of rock, sand, or gravel in which all pore spaces are filled with water. Aquifers serve as the source of fresh water for wells and springs. Water originates as rain or melted snow, which either accumulates on the soil surface or percolates through the soil to the water table and into ground water.

Many human activities can have a detrimental effect on water quality. Contamination from industrial wastes, petroleum products, fertilizers, manures, and municipal sewage and septic tanks all affect the quality of our surface and ground water. Actions have been taken on a national scale to eliminate or to minimize the effects of these sources of possible contamination.

Agricultural pesticides may also contaminate aquifers or surface water sources. Pesticides enter surface and ground water because of the actions of the landowner. Pesticides can enter water directly through accidental spills, back siphoning, intentional excessive pesticide application, improper application, improper disposal of rinsates, improper container disposal, and through poorly constructed or maintained wells. These situations are all avoidable and can be prevented with greater attention to proper management practices and through upgrading application equipment.

Pesticides can enter water indirectly through normal leaching in the soil after application or through surface runoff (or surface-loss). Contamination due to surface-loss from agricultural fields can be reduced in part by modifying farming practices. Contour farming, no-till farming, and strip farming can reduce the movement and flow of water, thereby

minimizing any soil erosion from sloped fields. In some cases, selecting the appropriate pesticide can reduce the potential for leaching and for surface-loss as well.

Each agricultural chemical or pesticide used today has different water solubility and other chemical characteristics that affect its behavior in and on soils. The solubility and behavior of a pesticide in the soil is dependent in part on the soil texture, soil type (morphology), and organic-matter content. These factors all affect the degree of soil absorption of a pesticide.

Soils with a high organic-matter content or with considerable amounts of clay in their structure tend to strongly adsorb pesticides, thus reducing leaching. However, coarse-textured sandy soils low in organic matter have low adsorption, which tends to permit downward leaching of pesticides. A knowledge of your particular soil type and soil texture will help in selecting pesticides which have limited potential for surface-loss or leaching.

In places where soils are very sandy or gravelly with little organic matter, a producer should select a pesticide that has only small or medium leaching potential. Use of a chemical with a large leaching potential in this situation could lead to contamination of ground water. In situations where fields have considerable slope or in areas where soil is permanently saturated with water, it is advisable to use a pesticide that has a small to medium potential for surface-loss.

In areas where ground water is quite shallow, there is a good possibility that pesticides can enter the ground water through leaching. In areas of limestone composition, it is possible that pesticides can enter ground water through developing sinkholes. In these situations, selection of pesticides

used in agricultural production is critical to prevent possible contamination of surface and ground waters.

More than 65,000 pesticides are registered in the United States. Many of these have been identified in our nation's lakes and streams. Identifying all of the potential pesticides and the harm they may cause to our waterways is impossible in this guide. However, several agencies and universities involved in pesticide regulation and water quality can offer great resources to help you keep our waters safe. Below is a list of resources to help you learn more about the pesticides you use and ways to protect Alabama's water resources. With these links you can learn more about your pesticide and how they will affect our environment.

- [US. Environmental Protection agency](http://www.epa.gov) (www.epa.gov)
- [National Pesticide Information center](http://www.npic.orst.edu) (Find specific information about your pesticide's active ingredient.) (www.npic.orst.edu)
- [Extension Toxicology Network](http://extoxnet.orst.edu) (extoxnet.orst.edu)
- [eXtension Pesticide Environmental Stewardship](https://www.extension.org/pesticidestewardship) (https://www.extension.org/pesticidestewardship)
- [Alabama Department of Agriculture and Industries](http://agi.alabama.gov) (http://agi.alabama.gov)

For detailed and specific product information, it is highly suggested that you view your pesticide label and follow all instructions related to drift and runoff.



**FOR MORE INFORMATION** on pesticides, pesticide safety, or submitting samples for analysis, see the following publications in the IPM series: IPM 1293, "Safety." Safety contact information; worker protection standards; the safe use, handling, and storage of pesticides  
IPM 1294, "Submitting Samples." Procedures for submitting samples for diagnosis, analysis, and identification  
IPM 1317, "Appendix." Pesticide guidelines for agronomic crops, including preharvest intervals; rain-free requirements; grazing restrictions; crop rotation guidelines; and the names, classifications, and toxicities of pesticides.

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**For more information**, contact your county Extension office. Visit [www.aces.edu/counties](http://www.aces.edu/counties) or look in your telephone directory under your county's name to find contact information.

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Use pesticides **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed. Do not use pesticides on plants that are not listed on the label

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The pesticide rates in this publication are recommended **only** if they are registered with the Environmental Protection Agency or the Alabama Department of Agriculture and Industries. If a registration is changed or canceled, the rate listed here is no longer recommended. Before you apply **any** pesticide, check with your county Extension agent for the latest information.

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Trade names are used **only** to give specific information. The Alabama Cooperative Extension System does not endorse or guarantee any product and does not recommend one product instead of another that might be similar.

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