

A person wearing a blue protective suit and hood is operating a red tractor with a long sprayer boom attached. The tractor is moving through a vast field of green crops, likely strawberries, which are planted in neat rows. The background shows a dirt path and more of the field under a clear sky.

Understanding Pesticide Labels for Making Proper Applications

University of California
Agriculture and Natural Resources

Statewide Integrated Pest Management Program
Pesticide Safety Education Program



Understanding Pesticide Labels for Making Proper Applications

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p. 17.

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p. 20.

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These pocket cards are meant to help pesticide handlers, applicators, and safety trainers, as well as Pest Control Advisers (PCAs).

No endorsement of named or illustrated products is intended, nor is criticism implied of similar products that are not mentioned or illustrated.

Contents



- | | | | |
|---------|--|---------|---------------------------------|
| 1 | What is a Pesticide Label? | 17..... | Storage and Disposal Directions |
| 3 | When to Read the Label | 18..... | Warranty |
| 5 | What Pesticide Labels Contain | 19..... | Directions for Use |
| 5 | Brand Name | 20..... | Misuse Statement |
| 6 | Formulation | 21..... | Restricted-Entry Statement |
| 7 | Ingredients | 22..... | Posting Requirements |
| 8 | Registration and Establishment Numbers | 23..... | Restricted-Use Pesticides |
| 9 | Agricultural Use Requirements | 24..... | Pesticide Resistance |
| 10..... | Manufacturer | 25..... | Safety Data Sheet |
| 11..... | Contents | 26..... | Avoiding Illegal Residues |
| 12..... | Signal Word | | |
| 13..... | Toxicity Categories | | |
| 14..... | First Aid | | |
| 15..... | Precautionary Statements | | |

What is a Pesticide Label?

Pesticide labels are complex legal documents that you must read and understand before applying pesticides. Make applications in strict accordance with all label instructions and state and local regulations. It is the law.



The Code of Federal Regulations sets the format for labels and designates the information they must contain.

What is a Pesticide Label?

The U.S. EPA* requires manufacturers to attach additional fold-out labels, or booklets, to packages that are too small to have all the required information printed on them. These booklets, together with the base label, are the complete pesticide label. Before purchasing a pesticide, make sure you have the complete label, including any accompanying label booklets.



People who employ pesticide handlers and fieldworkers in California are required by law to provide unrestricted access to complete labels and Safety Data Sheets.

*United States Environmental Protection Agency

When to Read the Label



Before buying the pesticide

- Is it registered for the intended use?
- Are there restrictions at the application site?
- Can it be used under current weather conditions?
- Does it control the life stage of your pest?
- What personal protective and application equipment do you need?

Before mixing and applying the pesticide

- Learn what first aid and medical treatments are necessary if exposure occurs
- Learn how to mix and safely apply the material
- Take precautions to prevent exposure to people and nontarget organisms

When to Read the Label

When storing pesticides

- Keep in original containers in locked areas away from children
- Take precautions to prevent fire and explosion hazards



Before disposing of unused pesticide and empty containers

- Prevent environmental contamination and hazards to people
- Check with the local agricultural commissioner for restrictions and requirements

What Pesticide Labels Contain

Brand Name. A brand name is the name the manufacturer gives to the product and is used for all advertising.



Daconil Action™

syngenta.

Flowable Fungicide

For control of turf diseases: sod farms; turf on golf courses, professional and collegiate athletic fields; and lawns around commercial and industrial buildings.

Active Ingredients:

Chlorothalonil (tetrachloroisophthalonitrile)*	53.94%
Acibenzolar-S-methyl; Benzo(1,2,3)thiadiazole-7-carbothioic acid-S-methyl ester**	0.11%
Other Ingredients:	45.95%
Total:	100.00%

*CAS No. 1897-45-6

**CAS No. 135158-54-2

Contains: 6.1 pounds chlorothalonil per gallon

0.012 pounds acibenzolar-S-methyl per gallon

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1364

EPA Est. 50634-TX-001

SCP 1364A-L1 0411 343162

2.5 gallons

Net Contents

TM

What Pesticide Labels Contain

Formulation. Labels usually list the formulation type, such as emulsifiable concentrate or wettable powder. This information may be included in the brand name (e.g., Weed Killer EC).

GROUP M5 | P1 FUNGICIDES PULL HERE TO OPEN ▶

Daconil Action™

syngenta.

Flowable Fungicide

professional and collegiate athletic fields; and lawns around commercial and industrial buildings.

Active Ingredients:

Chlorothalonil (tetrachloroisophthalonitrile)*	53.94%
Acibenzolar-S-methyl: Benzo(1,2,3)thiadiazole-7-carbothioic acid-S-methyl ester**	0.11%
Other Ingredients:	45.95%
Total:	100.00%

*CAS No. 1897-45-6
**CAS No. 135158-54-2

Contains: 6.1 pounds chlorothalonil per gallon
0.012 pounds acibenzolar-S-methyl per gallon

KEEP OUT OF REACH OF CHILDREN.
WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1364
EPA Est. 50534-TX-001

SCP 1364A-L1 0411 343162

2.5 gallons
Net Contents

TM

What Pesticide Labels Contain

Ingredients. Pesticide labels list the percentage of active and other ingredients by weight. “Other ingredients” are all components of the formulation that do not necessarily have pesticidal action but may still pose safety or environmental problems. Active ingredients are listed by their **common or generic name** (e.g., chlorothalonil) and their **chemical name** (e.g., tetrachloroisophthalonitrile).

GROUP M5 | F1 FUNGICIDES | FULL HERE TO OPEN ▶

Daconil Action™

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Active Ingredients:

Chlorothalonil (tetrachloroisophthalonitrile)*

Other ingredients	56.05%
Total	100.00%

*CAS No. 1567-45-4
*EPA Reg. No. 100-1364
Contains: 0.1 pounds chlorothalonil per gallon
0.072 pounds azoxystrobin (0-methyl) per gallon

KEEP OUT OF REACH OF CHILDREN.
WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)
See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1364
EPA Est. 50534-TX-001
SCP 1364A-L1 0411 343162


2.5 gallons
Net Contents

When a pesticide contains more than one active ingredient, the label will state the percentage of each. Manufacturers do not usually individually identify the names or percentages of “other ingredients” in the pesticide.

What Pesticide Labels Contain

Registration and Establishment Numbers. The U.S. EPA assigns registration numbers to each pesticide. This number is required when reporting use. An *establishment number* identifies the site of manufacture or repackaging and may be on the pesticide label or the pesticide container itself. Registration numbers are unique to the specific product. If the product requires registration in California (but not with U.S. EPA), the Department of Pesticide Regulation will assign a California registration number.

GROUP MS | PT FUNGICIDES PULL HERE TO OPEN ▶

 **Daconil Action™**

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Flowable Fungicide

For control of turf diseases: sod farms; turf on golf courses, professional and collegiate athletic fields; and lawns around commercial and industrial buildings.

Active Ingredients:

Chlorothalonil (tetrachloroisophthalonitrile)*	53.94%
Acibenzolar-S-methyl; Benzo(1,2,3)thiadiazole-7-carbothioic acid-S-methyl ester**	0.11%
Other Ingredients:	45.95%
Total:	100.00%

*CAS No. 1987-45-4
**CAS No. 135158-54-2
Contains: 0.1 pounds chlorothalonil per gallon
0.01% pounds acibenzolar-S-methyl per gallon

KEEP OUT OF REACH OF CHILDREN.

**EPA Reg. No. 100-1364
EPA Est. 50534-TX-001**

What Pesticide Labels Contain

Agricultural Use Requirements. This statement appears in the *Directions for Use* section on labels approved for use in production agriculture, commercial greenhouses and nurseries, and forests. It refers to the Worker Protection Standard (40 CFR part 170). You must use the pesticide according to this standard as well as the requirements on the pesticide label. Personal protective equipment (PPE) requirements for early entry workers are also found here.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 (REI). 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 workers to enter treated areas during the restricted entry interval 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, chemical resistant gloves made of any waterproof material, shoes plus socks, protective eyewear (goggles, face shield, or safety glasses).

continued...

What Pesticide Labels Contain

Manufacturer. Pesticide labels always contain the name and address of the manufacturer of the product.

GROUP M5 | P1 FUNGICIDES



Flowable Fungicide

For control of turf diseases: sod farms; turf on golf courses, professional and collegiate athletic fields; and lawns around commercial and industrial buildings.

Active Ingredients:

Chlorothalonil	
(tetradichlorophthalonitrile)*	53.94%
Azbenzolar 5-methyl	
Benzo(1,2,3)thiadiazole-7-carboxylic acid 5-methyl ester**	0.11%
Other Ingredients:	45.95%
Total:	100.00%

*CAS No. 1897-45-6

**CAS No. 135158-54-2

Contains: 6.1 pounds chlorothalonil per gallon
0.012 pounds azbenzolar 5-methyl per gallon

See additional precautionary statements and directions for use inside booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1264
EPA Est. 50524-DX-001

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Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

2.5 gallons
Net Contents

KEEP OUT OF REACH OF CHILDREN.

WARNING/ AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID

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

NOTE TO PHYSICIAN: Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Inhaled. Do not breathe spray substantially but temporary eye get in eyes or on clothing. Wear protective eyewear (goggles, face glasses). Harmful if swallowed, especially repeated skin contact reactions in some individuals. Wash with soap and water after eating, drinking, chewing gum or using the toilet. Remove contaminated clothing before reuse.

Hazard: This product is toxic to bees and other beneficial insects. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do NOT contaminate water when disposing of equipment washwater or rinseate.

Chlorothalonil, one of the active ingredients in Daconil Action, is known to leach through

soil into groundwater under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Daconil Action can contaminate surface water through spray drift. Under some conditions, it may have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips; and areas of over-laying tile drainage systems that drain to surface water.

Physical or Chemical Hazards: Do not use, pour, spill, or store near heat or open flame.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal method.

Container Handling (less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/2 full with water and recap. Shake for 10 seconds. Pour rinseate into application equipment or a mix tank or store rinseate for later use and 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, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean-up procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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What Pesticide Labels Contain

Contents. Labels list the net contents, by weight or liquid volume, contained in the package.

GROUP M5 | P1 | FUNGICIDES



Flowable Fungicide

For control of turf diseases: sod farms; turf on golf courses, professional and collegiate athletic fields; and lawns around commercial and industrial buildings.

Active Ingredients:

Chlorothalonil	
(tetrachloroophthalonitrile)*	53.94%
Azbenzolar 5-methyl	
Benzol(1,2,3)thiadiazole-7-carboxithic acid 5-methyl ester**	0.11%
Other Ingredients:	45.95%
Total:	100.00%

*CAS No. 1897-45-6

**CAS No. 135158-54-2

Contains: 6.1 pounds chlorothalonil per gallon
0.012 pounds azbenzolar 5-methyl per gallon

See additional precautionary statements and directions for use inside booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1364

EPA Est. 50524-DX-001

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Manufactured for:

Syngenta Crop Protection, LLC

P.O. Box 18309

Greensboro, North Carolina 27419-8309

SCP 1364A-L1 0411

343162

2.5 gallons
Net Contents

KEEP OUT OF REACH OF CHILDREN.

WARNING/ AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID

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

NOTE TO PHYSICIAN: Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

May be fatal if inhaled. Do not breathe spray mist. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear appropriate protective eyewear (goggles, face shield, or safety glasses). Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after use before eating, drinking, chewing tobacco or using the toilet. Remove contaminated clothing before reuse.

Additional Hazard: This product is toxic to vertebrates and wildlife. DO NOT fly to water, to areas where surface water or to intertidal areas below the water mark. Drift and runoff may be aquatic organisms in neighboring water. Do not contaminate water when disposing of washwater or rinseate.

inil, one of the active ingredients in Action, is known to leach through

soil into groundwater under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Daconil Action can contaminate surface water through spray drift. Under some conditions, it may have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with infield 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 to surface water.

Physical or Chemical Hazards: Do not use, pour, spill, or store near heat or open flame.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal method.

Container Handling (less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/2 full with water and recap. Shake for 10 seconds. Pour rinseate into application equipment or a mix tank or store rinseate for later use and 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, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.


CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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What Pesticide Labels Contain

Signal Word. Pesticides are assigned a toxicity category (Category I, *Danger* to Category IV, no signal word required). The level of hazard determines the signal word manufacturers must use on their label.

GROUP M5 P1 FUNGICIDES PULL HERE TO OPEN ►

 **Daconil Action™**

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Flowable Fungicide

For control of turf diseases: sod farms; turf on golf courses, professional and collegiate athletic fields; and lawns around commercial and industrial buildings.

Active Ingredients:

Chlorothalonil (tetrachloroisophthalonitrile)*	53.94%
Acibenzolar-S-methyl, Benzo(1,2,3)thiadiazole-7-carbothioic acid-S-methyl ester**	0.11%
Other Ingredients:	45.95%
Total:	100.00%

*CAS No. 1997-45-6
**CAS No. 135158-54-2
Contains: 0.1 pounds chlorothalonil per gallon
0.012 pounds acibenzolar-S-methyl per gallon

**KEEP OUT OF REACH OF CHILDREN.
WARNING/AVISO**

SCF 1364A-L1 0411 343162 Net Contents

All pesticides are toxic and should be used with caution.

What Pesticide Labels Contain

Toxicity Categories



I. **Danger – Poison** → high toxicity (lethal if swallowed, inhaled, or absorbed through skin)

I. **Danger** → high toxicity

II. **Warning** → moderate toxicity

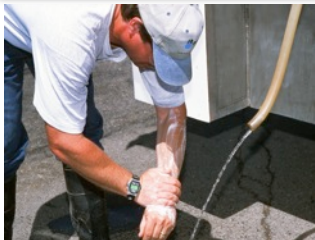
III. **Caution** → low toxicity

IV. **No Signal Word** → very low toxicity

What Pesticide Labels Contain

First Aid. This statement provides emergency information and tells when to seek medical attention. It describes first aid procedures for swallowing, skin and eye exposure, and inhalation of dust or vapors. This statement also includes a hotline number.

FIRST AID	
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.
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 swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	



What Pesticide Labels Contain

Precautionary Statements. Precautionary statements describe pesticide hazards. This section may include up to three areas of hazard.

PRECAUTIONARY STATEMENTS

... injury. Do not get in eyes or on clothing. Wear appropriate protective eyewear (goggles, face shield, or safety glasses). Harmful if swallowed.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

Mixers, Loaders, and all other Handlers (except Applicators) must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any N, R, P or HE prefilter.
- Protective eyewear (goggles, face shield, or safety glasses)

1. Hazards to people and domestic animals

- PPE to wear while handling containers, mixing, loading, and applying the product
- Why the pesticide is hazardous
- Adverse effects from exposure



What Pesticide Labels Contain

Precautionary Statements (Continued)

Environmental Hazards

This product is toxic to aquatic invertebrates, fish and wildlife. DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment washwater or rinsate.

Chlorothalonil, one of the active ingredients in Daconil Action, is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Daconil Action can contaminate surface water through spray drift. Under some conditions, it may have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with infield 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 to

Physical or Chemical Hazards

- 2. Environmental hazard** – Identifies if pesticide is toxic to nontarget organisms (honey bees, fish, birds, other wildlife)
- 3. Physical and chemical hazards**



What Pesticide Labels Contain

Storage and Disposal Directions. This section provides directions for proper storage and disposal of pesticides and empty pesticide containers.

STORAGE AND DISPOSAL

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

Container Handling [less than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. 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 and 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, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.



What Pesticide Labels Contain

Warranty. Manufacturers usually include a warranty and disclaimer on their pesticide labels. This section of the label informs you of your rights as a purchaser and limits the liability of the manufacturer.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

What Pesticide Labels Contain

Directions for Use. It is a violation of the law if you do not follow the directions for use. These instructions tell you how to apply the pesticide – how much to use, where to use it, and when to apply it. Directions also include the preharvest intervals (PHI) for all crops if appropriate.

Citrus Fruits (Crop Group 10)

calamondin; citron; citrus citron; citrus hybrids (includes chironja); grapefruit; kumquat; lemon; lime; mandarin (tangerine); orange, sour; orange, sweet; pummelo; satsuma mandarin; tangelo; tangor; white sapote (*Casimiroa* spp.)

Pest	Rate/Acre	Use Directions
Citrus rust mite	4.0 pints	USE RESTRICTIONS
Asian citrus psyllid ¹ Citrus thrips (suppression only) Citrus leafminer (suppression only) Leafhoppers Mealybugs Other mites (see Target Species)	2.0 to 4.0 pints	<ul style="list-style-type: none">• Apply by ground using a minimum of 100 gallons of water per acre. For full size trees, use a minimum of 200 gallons of water per acre.• Do not apply by air.• Do not apply more than 8.0 pints per acre per growing season.• Do not make more than 2 applications per growing season.• Allow 14 days between applications.• Preharvest Interval (PHI): 14 days• Do not apply to citrus nurseries or citrus in greenhouses.• Do not apply through any type of irrigation system.

¹ For best results, use for control of adults and nymphs present at time of application when newly expanding foliage flush is present.

Directions for use include

- Target pests of the given pesticide
- Crops, plant species, animals, or other sites to which you can apply the pesticides
- Special use restrictions

What Pesticide Labels Contain

Misuse Statement. The misuse statement reminds users to apply pesticides according to label directions.

DIRECTIONS FOR USE

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

Daconil Action must be used only in accordance with recommendations on this label or in separately published

DO NOT apply this product in a way that will contact workers or other persons, or pets 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 (WPS), 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 (REI). 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 workers to enter treated areas during the restricted entry interval 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, chemical resistant gloves made of any waterproof material, shoes plus socks, protective eyewear (goggles, face shield, or safety glasses).

continued...



What Pesticide Labels Contain

Restricted-Entry Statement. Usually a period of time must elapse before anyone can enter an area treated with pesticides unless they are wearing PPE. This period is the restricted-entry interval (REI) and may vary according to the crop or site being treated and geographic location. The REI statement is most commonly found in the Agricultural Use Requirements. Some uses in California require longer intervals than those listed on the label. This information can be found in the California Code of Regulations Section 6772.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 (REI). 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 workers to enter treated areas during the restricted entry interval of 12 hours.

involves contact with anything that has been treated, such as plants, soil, or water, is: long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material, shoes plus socks, protective eyewear (goggles, face shield, or safety glasses).

continued...



What Pesticide Labels Contain

Posting Requirements. Sometimes you must post warning signs outside of treated areas to notify workers and others that they cannot enter during the REI. This information is found in the Agricultural Use Requirements. Also check current state local laws to determine posting requirements. Local offices of county agricultural commissioners have this information.

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), notification to workers 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 workers to enter treated areas during the restricted entry interval (REI) listed except as provided for by the WPS. The REI and Exceptions are listed in the Directions for Use associated with the crop. Notify workers of these exceptions (including when entry is permitted for each of the tasks named in the exception).

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 over long-sleeved shirt and long pants,
- chemical-resistant gloves made of any waterproof material,
- chemical-resistant footwear plus socks, and



Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

Restricted-Use Pesticides

Statement of Use Classification. The U.S. EPA classifies pesticides as either general-use or restricted-use. Pesticides without this statement are general-use, except where special state restrictions apply.

RESTRICTED USE PESTICIDE **(GROUND AND SURFACE WATER CONCERNS)**

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

For Ground Application Only

Sale, use, and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

GROUP 5 15 27 HERBICIDES

 Lumax[®] EZ
Herbicide

syngenta.

A Preemergence Herbicide for Control of Annual Grass and Broadleaf Weeds in Field Corn, Field Production Seed Corn, Field Silage Corn, Sweet Corn, Yellow Popcorn, and Grain Sorghum

Active Ingredients*:

S-Metolachlor (CAS No. 87392-12-9)	27.10%
Atrazine (CAS No. 1912-24-9)	0.94%
Atrazine Related Compounds	0.21%
Mesotrione (CAS No. 104206-82-8)	2.71%

Other Ingredients:	60.04%
Total:	100.00%

*Active ingredients per gallon: S-metolachlor 2.49 pounds, Mesotrione 0.249 pounds, and Atrazine 0.935 pound.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

 Callisto Plant Technology[®]

EPA Reg. No. 100-1442 EPA Est. 100-LA-001
SCP 1442A-L1B 0414
4046618

2.5 gallons
Net Contents

Federal restricted-use pesticides will have a special statement printed on the label in a prominent place. In order to determine if a pesticide is a California restricted material, refer to Title 3, California Code of Regulations Section 6400.

Pesticide Resistance

Resistance management information may be included on some labels but is not required. This information helps you rotate pesticides based on their Mode of Action (MOA).



GROUP 21A INSECTICIDE

GROUP M5 | P1 FUNGICIDES

Group 3 Herbicide

Example pesticide MOA classification found on labels

For more information on resistance, visit the UC IPM website <http://ipm.ucanr.edu>

Safety Data Sheet

In addition to the label, review the pesticide's Safety Data Sheet (SDS) to get details about pesticide hazards.

Information found on SDSs include

- Signal word
- Chemical characteristics of hazardous ingredients
- Fire and explosion hazards
- Health hazards
- Pictograms that illustrate specific human and environmental hazards
- Reactivity and incompatibility characteristics
- Storage information
- Emergency spill or leak cleanup procedures
- LD₅₀ and LC₅₀ ratings (common measures of acute toxicity used to determine signal words) for test animals
- Emergency phone numbers of the manufacturer



Avoiding Illegal Residues

Follow all label instructions to ensure safe and legal applications.

To avoid illegal pesticide residues, pay close attention to

- Application rate
- Use instructions
- Preharvest interval (PHI)
- Timing of applications
- Placement of applications



It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994 [USERRA]), as well as state military and naval service. This policy is intended to be consistent with the provisions of applicable state and federal laws and University policies.

University policy also prohibits retaliation against any employee or person in any of its programs or activities for bringing a complaint of discrimination or harassment pursuant to this policy. This policy also prohibits retaliation against a person who assists someone with a complaint of discrimination or harassment, or participates in any manner in an investigation or resolution of a complaint of discrimination or harassment. Retaliation includes threats, intimidation, reprisals, and/or adverse actions related to employment or to any of its programs or activities.

In addition, it is the policy of the University and ANR to undertake affirmative action, consistent with its obligations as a Federal contractor, for minorities and women, for persons with disabilities, and for covered veterans. The University commits itself to apply every good faith effort to achieve prompt and full utilization of minorities and women in all segments of its workforce where deficiencies exist. These efforts conform to all current legal and regulatory requirements, and are consistent with University standards of quality and excellence.

In conformance with Federal regulations, written affirmative action plans shall be prepared and maintained by each campus of the University, including the Division of Agriculture and Natural Resources. Such plans shall be reviewed and approved by the Office of the President and the Office of the General Counsel before they are officially promulgated.

Inquiries regarding the University's nondiscrimination policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1318.

Notes