

**Town of Seymour  
Public Works PPE Policy Committee**

**Minutes**

**Special Organizational Meeting  
Thursday, February 9, 2012 at 7:00pm  
Public Works Facility**

**Members Present:** Phil Wilhelmy, Mike Labon, Wayne Finkle, Craig Stevens and Bob Koskelowski, Jr.

**Others Present:** Sean Walsh

**Call Meeting to order**

The Chairman of Public Works, Sean Walsh, called the meeting to order at 7:00pm.

**Item #2 – Pledge of Allegiance**

Everyone saluted the Flag and recited the Pledge of Allegiance.

**Item #3– Appoint a Chairman**

Motion to appoint Phil Wilhelmy as chairman.

Motion: Wayne Finkle

Second: Mike Labon

Yes: 4

No: 0

1: Abstain (Phil Wilhelmy)

**Item #4 – Discussion of Personal Protective Equipment**

Mike Labon presented manual for Pesticide Operator's Certification from the Department of Environmental Protection

Bob Koskelowski, Jr. presented a packet titled "The Label" which described how to properly read a chemical label.

Phil Wilhelmy suggested the committee form a mission statement to establish the main purpose of committee.

The committee agreed to establish responsibility protocol for the assignment of tasks related to unrestricted pesticide handling.

- Establish credential of dispensing supervisor for products
- Establish parameters for credentials of the individual dispatching work related to chemicals
- Develop criteria for complete sign-off related to confirmation and understanding of handling and personal protective equipment required for usage.
- Develop procedure for policing of compliance with PPE usage and proper handling procedures.

**Item #5 – Establish Meeting Schedule**

Committee established a meeting schedule to meet at 6:30pm prior to all regularly scheduled monthly Public Works meetings

**Item #6 – Public Comment**

Sean Walsh, 126 Pearl Street: Suggested that a policy be established where a copy of the MSDS paperwork follow the chain of custody with all chemicals.

**Item #7 – Adjournment**

Motion to adjourn

Motion: Mike Labon

Second: Wayne Finkle

Yes: 5

No: 0

0: Abstain

Meeting was adjourned at 8:15pm.

Submitted by:

Sean Walsh

Board of Public Works

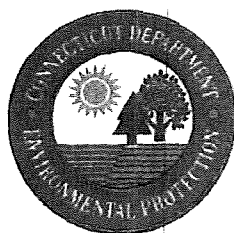
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June / 003

# **MANUAL FOR PESTICIDE OPERATOR'S CERTIFICATION**

## **OPERATOR'S CERTIFICATION**

**JANUARY 2004**



**Department of Environmental Protection  
Bureau of Waste Management  
Pesticide Management Program**

**79 Elm Street  
Hartford, CT 06106-5127  
Tel: (860) 424-3369  
<http://dep.state.ct.us>**

Any person who applies pesticides or assists in the application of pesticides commercially in Connecticut, in other than a supervisory capacity, must have an operational certificate (also called an operator license). This means that any person who is hired to do pesticide application work for a commercial company will need an operational certificate. **An operational certificate does not allow an individual to go into business for himself;** a supervisory certificate is required for this.

Every company applying pesticides commercially must have a certified supervisory applicator. **That individual must either be present at the site during pesticide application or provide specific written instructions to the certified operator.** The operator must not apply pesticides without the written instructions. If, during the course of making an application, a treatment is required or requested that is not included in the written instructions held by the operator, the operator must not perform that treatment until he has obtained written instructions pertaining to the new application.

Any person **not** employed by a **commercial** business (examples: golf course, property management, and government employees), but applying any **restricted-use** pesticide must also have an operator's certification and instructions from a certified supervisor.

### **Governmental Operational Certification**

No fee shall be charged to any federal, state or municipal employee who applies pesticides as part of his or her duties as a governmental employee provided that any certificate for which a fee is not charged shall be automatically void if the holder is no longer a government employee.

### **Testing**

In order to obtain operational certification an applicant must be at least 18 years of age and pass a written examination covering the material in this manual. The applicant must be able to read and comprehend pesticide label information and demonstrate knowledge of the safe and proper use, application, handling and storage of pesticides. There will be a pre-registration license fee of one hundred dollars (\$100.00). **If you fail the test for an operational certificate you must wait a minimum of thirty days before you can take the examination again.** Any questions can be directed to the Pesticide Management Division at (860) 424-3369.

### **Renewal**

The operator's certificate must be renewed prior to the expiration date that appears on the certificate. The Department of Environmental Protection (DEP), Pesticide Management Division will mail renewal information to the certified operator prior to the expiration of the certificate. **If your address changes you must notify the Pesticide Management Division of you change of address within 30 days in accordance with state regulation 22a-66-5(e).**

If you lose your certificate you should apply for a duplicate from DEP Pesticide Management Division. Forms for requesting a duplicate are available from the Pesticide Management Division.

To possess an operator's certificate is a privilege. Remember that it can be suspended or revoked if pesticides are misused or if pesticide laws and regulations are not followed.

## WHAT ARE PESTICIDES

Pesticides are poisons developed to control pests that cause problems for man. Pesticides act after the pest comes in contact with the poison or swallows the poison. Included among pesticides are insecticides (to kill insects), herbicides (to kill plants), fungicides (to kill fungi) and rodenticides (to kill rodents).

Pesticides are registered for use first by the federal government through the Environmental Protection Agency (EPA) and then by the Connecticut Department of Environmental Protection (DEP), Pesticide Management Division. Pesticides may be registered as **general-use**, which means they can be purchased and used by anyone without a certificate or permit, **providing they do not use them in a commercial application**. When general-use pesticides are to be used commercially, an operational or supervisory certificate is required by the applicator. Some pesticides are registered as **restricted-use** and can be purchased by applicators that hold a commercial supervisory certificate. An operational certificate holder **cannot** purchase restricted-use pesticides. There are also some pesticides registered for **permit-use**, which means a special permit must be obtained from the DEP, Pesticide Management Division in order to use them. If a pesticide is not registered with the EPA and the DEP, it cannot be lawfully applied in Connecticut.

## WHEN ARE PESTICIDE MOST DANGEROUS?

Pesticides are most poisonous when they are in the concentrated form, just as they come from the manufacturer. Before application, these concentrated materials are diluted (mixed with water or oil). This means that you should be extra careful when mixing pesticides. That is the very time that you will be most likely to inhale poisonous fumes or dust or accidentally come into contact with the concentrated pesticide.

## WHAT DO I DO IN CASE OF A SPILL?

You must be careful not to spill any of the concentrated pesticide, and if an accident does happen, to clean it up immediately. Spilled pesticides and pesticide mixtures should never be washed down storm drains or into the street. They should be absorbed and disposed of properly. Before you go out on a job ask your supervisor for equipment that you can use in case of spills. This would include waterproof gloves and boots, an absorbent material that can be used to soak up the poison (Speedy Dri, activated charcoal or kitty litter), soap, water and a shovel. Once the poison is soaked up by the absorbent material, it can be shovelled into a container. Detailed information on the best way to clean up a spill should be obtained from your supervisor before an accident occurs. Do not depend on luck. Think ahead. **All Spills** need to be reported immediately to DEP, Oil and Chemical Spills Response Division at (860) 424-3338.

You should avoid mixing pesticides for an application in the customer's house or yard. **Do not mix pesticides near a pond or stream**. If a spill occurs in these areas, there is a chance for serious damage to people or wildlife.

## WHO IS APT TO BE POISONED WITH PESTICIDES?

**Children.** The greatest number of poisoning cases by far, involve young children. They will crawl anyplace, climb anywhere, and put anything into their mouths. If pesticides are available, they will put them into their mouths. The only way to keep children from contacting poisonous pesticides is to keep the material locked up when not in use and to make sure equipment and chemicals are never left unattended. Put all pesticides away safely before you clean up.

When a pesticide bag or container is emptied into the tank, it is not completely empty. There will still be small amounts of pesticide left on the bottom and the sides. There have been many cases of children being injured or killed from playing with "empty" bags and containers of pesticides.



## HOW CAN I TELL IF I AM BEING POISONED?

Pesticides can enter the body through the skin, inhalation into the lungs, or by swallowing. The most common cause of pesticide poisoning for applicators is through skin contact. Some pesticides enter the body through the skin quite readily. Certain parts of the body absorb pesticides more quickly. A pesticide spilled on the groin area can be absorbed nearly as rapidly as through swallowing the poison. Most of the pesticide spilled on your skin is absorbed in the first few minutes. If you spill a pesticide on your self, immediately take off any clothing that is wet. Wash your skin with soap and water and put on clean clothing. If a pesticide gets in your eye, wash out the eye with plenty of clean water. Then call a doctor. It is best to avoid direct contact with pesticides by wearing the proper protective clothing. The pesticide label will tell you what protective equipment is necessary.

Pesticide poisoning may occur rapidly after one exposure (acute poisoning), or it may occur over a longer period of time (chronic poisoning). If you are not adequately protected from the pesticide, your body may slowly absorb small amounts each time you apply pesticides. These small quantities can accumulate in your body causing damage over a period of time.

The symptoms of pesticide poisoning may be similar to those of the flu or other diseases. These symptoms may include headaches, dizzy spells, nervousness, cramps, nausea, vomiting, blurred vision or excess sweating. If you feel sick, stop spraying and consult your supervisor. If you or one of your co-workers show signs of pesticide poisoning, get to a doctor immediately. Be able to provide the doctor with label information so the doctor will know what treatment to use.

## HOW CAN I PROTECT MYSELF?

You can protect yourself from pesticide poisoning only if you are careful. One moment of carelessness can cost a life or cause serious injury.

If you apply pesticides outdoors, be careful of drift, especially when there is a wind. Wind will blow pesticides long distances into places and onto things that you never intended. Babies have been sprayed, honeybee colonies destroyed, valuable plants damaged; all from not paying attention to where a spray was actually going. Be sure to notify people who may be subject to drift to bring in their wash or the children's toys so they will not be wet with spray. Not only will this ensure everyone's safety, but it will prevent angering customers or neighbors who will most likely file a complaint with the DEP.

If you apply pesticides indoors, make sure you do not apply them where children or pets will contact these poisons. Do not apply pesticides unless the label states you can use them for that intended purpose. Be particularly careful treating in kitchens or eating facilities, and where infants, handicapped or elderly people may be exposed to the chemicals. If you are not sure if an application is safe, consult your pesticide supervisor before continuing.

Never eat, drink or smoke while applying pesticides as this can increase the chance of being poisoned. Wash your hands thoroughly with soap and water before taking a break to do these things or before using the toilet..

Regularly check your pesticide application equipment. Check nozzles periodically to be sure they are functioning properly. Check hoses to be sure there are no leaks or weak spots. Keep your application equipment clean so if anyone touches it, they will not be contaminated. Always clean application equipment thoroughly when changing pesticides to prevent cross contamination. Release the pressure in your tank to prevent accidental discharge of pesticide.

Be sure to wear any protective clothing or gear required by the pesticide label. Protective clothing may include waterproof gloves, boots, goggles, face shield, neck and head covering, and respirators. You should always try to wear pants and long sleeved shirts when spraying to prevent skin contact with pesticides. Protective clothing should be worn during the entire use process. This includes when carrying containers, mixing pesticide solutions, applying the pesticide, and when putting away the pesticide.

### HOW CAN I PROTECT OTHERS?

Never put any pesticide in an unlabeled container. Even if a friend or relative asks for some pesticide, do not pour any into a bottle or can for them. People have been hospitalized and killed from drinking or using pesticides that they had mistaken for something else. Do not be responsible for injury or death to others because of thoughtlessness or a moment of carelessness. Pesticides are meant to kill pests, not people. Leave them in the original, labeled containers.

Proper disposal of pesticides and empty containers is another means of protecting others. If you use up a pesticide completely, rinse the original pesticide container out with water three times and add this water to the spray tank. If you do this three times you will lessen the possibility that anyone will touch the concentrated pesticide that might be left in the container.

Because there will be small amounts of poisonous chemicals left in the "empty" bags, jars, or cans, you should dispose of these containers with care. Take them back with you to the office or warehouse so they may be disposed of properly. Puncture the cans and crush them so they cannot be used again. However, **do not puncture aerosol cans** because the gas left in the can may cause it to explode. Empty containers should never be disposed of on site. You should consult your supervisor to determine the best way to get rid of empty containers and leftover materials in the spray tank. The best method of preventing excess mixed pesticides is to mix up only as much spray material as you need to use for that day.

Learn about available Integrated Pest Management (IPM) programs to reduce the amount of pesticides needed.

### WHAT IS INTEGRATED PEST MANAGEMENT?

IPM is a planned system that uses many pest control techniques to reduce the number of pests present. The purpose of IPM is to reduce pesticide use and still keep pests controlled. An important part of IPM is to prevent pests from becoming a problem. This can be accomplished by making the environment unfavorable to pests. Two examples of environmental modifications are:

Use proper liming, watering, fertilizing and mowing height to maintain healthy turf for lawn IPM. When the turf is healthy, the environment for pests is unfavorable, so weeds, diseases, and insects cause less damage.

Since carpenter ants prefer an environment of decaying or moist wood, IPM control techniques may include household repairs to replace all moist and decaying wood. Environmental modification should also include removal of shubbery contacting the siding of an infested building, since this may be the route of entry for the carpenter ants.

Some pests can be tolerated in small quantities. In order to determine if a pest population will cause damage, a manager can monitor the pests. This is done by counting the number of pests and making a decision about whether they will cause significant damage. When it is determined that the pests are causing significant damage, a supervisor may then make the decision to apply pesticides.

### WHY USE INTEGRATED PEST MANAGEMENT?

Chemical pest controls have had widespread use. Many chemicals were applied as a preventive method regardless of present or predicted pest infestations. These pesticide practices increased the risk of damaging beneficial organisms (non-target organisms). Frequent usage of any single pesticide can also increase the resistance of the pest to that control agent. Pesticide use can leave harmful residues and some pesticides have been found to infiltrate and pollute groundwater used for drinking. IPM can help protect man and other non-target organisms and decrease our dependence on toxic chemicals.

### WHY SHOULD I READ THE LABEL?

The print on the label is often small and hard to read, but every word is there for a purpose. One of the most important things you can do is read the label. You should do it each time you get a new bag or container of pesticide. The new container may look the same, but often the directions may be changed or there may be another kind of pesticide using a similar trade name.

### WHAT SHOULD I LOOK FOR ON THE LABEL?

The label on the pesticide container tells what the pesticide is, what it is used for, how to mix it, what pests it will control, what plants and animals may be particularly harmed if one is careless, protective equipment needed for proper handling and use, hazard statements, environmental hazards and compatability with other pesticides or fertilizers.

There is a sample of a pesticide label included on the next page of this manual. Use the sample label to find the following information:

- #1. **Trade Name** The trade name is usually in large print on the label. On the sample label in this manual the trade name is **Dylox 6.2**.
- #2. **Type of Pesticide** The type of pesticide may be an insecticide, a fungicide, a herbicide, etc. The sample label indicates that the type of pesticide is an insecticide in the statement **Granular Insecticide**.
- #3. **Kind of Formulation** The kinds of formulation of pesticides include dusts, wettable powders, granules, spray baits, pressurized cans (bombs) or emulsifiable concentrates. On the sample label the kind of formulation is a **granular**.
- #4. **Active Ingredients** All active ingredients are listed. This includes a common name and a chemical name, which is often printed in parentheses. The active ingredient in the sample label is **Dimethyl (2,2,2-trichloro-1-hydroxy—ethyl) phosphonate**.
- #5. **Net Contents** The net contents are a measure of weight or volume. In the sample label the net contents equal **30-pound bag**.
- #6. **EPA Registration Number** The EPA Registration Number is an identification for the product assigned by the U.S. Government Environmental Protection Agency (EPA). On the sample label the EPA Registration Number is **3125-406**.
- #7. **Hazard Statement** The Hazard Statement included on all pesticide labels states “**keep out of reach of children**”. Also included are **Signal Words**, which group pesticides into categories according to their toxicity to animals, people and the environment. There are three signal word categories: The most dangerous pesticides are labeled **DANGER** and may also say **POISON** and have a skull and crossbones symbol. These pesticides are highly toxic. You should be extremely careful with these pesticides for they can easily kill you and those around you. The next most dangerous pesticides have the word **WARNING** on the label. These are moderately toxic. The word **CAUTION** on the label means the pesticide is the third most dangerous, or slightly toxic. On the sample label the signal word is **CAUTION**.



- #8. **Directions for Use** On the sample label the Directions for Use section tells you that this pesticide may be used on turf. It tells you how much pesticide to apply, and when to apply it. Some pesticide labels contain a reentry statement, which notifies the applicator when a treated area can be safely reoccupied. **The pesticide should never be used under any conditions that are not listed on the label.**
- #9 **Storage and Disposal** The storage and disposal portion of the label tells you under what conditions to store pesticides and how to dispose of pesticides safely. Find the Storage and Disposal section on the sample label.
- #10 **Environmental Hazards** The environmental hazards statement includes any possible risks or dangers the pesticide may cause to the environment. The sample label states that this pesticide is toxic to fish, birds and wildlife. It also states to be careful to not to contaminate water or crops used for food or forage.

# 1 Dylox® 6.2

2 & 3

## Granular Insecticide

For Control of White Grubs, Mole Crickets, Sod Webworms, and Cutworms.

### ACTIVE INGREDIENT:

4

Dimethyl (2,2,2-trichloro-1-hydroxy-ethyl)phosphonate ..... 6.2%

INERT INGREDIENTS: ..... 93.8%  
100.0%

### FAST-ACTING

Treats 10,000 sq ft for White Grubs and Mole Crickets

Treats 15,000 sq ft for Sod Webworms

6

STORE IN A DRY PLACE

5

EPA Reg. No. 3125-406

30-Pound Bag

7 **STOP - Read the label before use.**  
**Keep out of reach of children.**

## CAUTION AVISO

PRECAUCION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. (TO THE USER: If you cannot read or understand English, do not use this product until the label has been explained to you.)

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** May be harmful if swallowed. Do not take internally. Do not breathe dust. Avoid contact with eyes, skin or clothing. Wash contaminated clothing before re-use. Wash thoroughly after handling and before eating or smoking. Keep children and pets off treated areas until this material is washed into the soil and the grass is dry. Do not contaminate feed or foodstuffs. Do not use treated areas or clippings from treated areas for feed or forage.

### STATEMENTS OF PRACTICAL TREATMENT

**If swallowed:** Call a physician or Poison Control Center immediately. Induce vomiting by giving victim 1 or 2 glasses of water and touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person. **If in eyes:** Flush eyes with plenty of water. Get medical attention. **If on skin:** Remove contaminated clothing and wash affected area with soap and warm water. Wash clothing before re-use. **If inhaled:** Remove victim to fresh air. Apply artificial respiration if indicated. Get medical attention immediately.

**To Physician:** Prolonged exposure will cause cholinesterase depression. Atropine Sulfate is antidotal. 2-PAM is also antidotal and may be administered in conjunction with atropine.

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## ENVIRONMENTAL HAZARDS

Do not contaminate water by cleaning of equipment or disposal of wastes. This product is toxic to fish, birds, and wildlife. 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 apply where runoff is likely to occur. Use only as directed on this label. Do not use on crops used for food or forage.

## DIRECTIONS FOR USE 8

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

**IMPORTANT:** Read these entire Directions for Use and Conditions of Sale before using DYLOX 6.2 Granular Insecticide.

**CONDITIONS OF SALE:** THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. BAYER OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF BAYER AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

**NOTE:** Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

### SURFACE FEEDING INSECTS

Sod Webworms are capable of destroying large areas of turf. They live through the winter as a worm and change to a moth in May. Eggs are deposited very soon throughout the lawn and new worms hatch in May. By killing this first "brood" it is possible to reduce the worm population of later broods and therefore reduce turf damage.

**How to Apply:** Turf should be free of troublesome thatch which encourages insects. Rake or de-thatch the area and remove the debris to expose insect hiding places. Water the lawn and cut to proper height. Apply granules as recommended and sprinkle the area to move the insecticide down to the soil surface where insects feed.

## Dylox® 6.2

**How Much to Apply:** For control of Sod Webworms (Lawn Moth Larvae), and Cutworms apply at the rate of 2 pounds per 1,000 sq ft of turf. (30 lb. bag treats 15,000 sq ft) Refer to chart for respective spreader settings. Make sure your spreader is calibrated for this product before application.

**When to Apply:** Treat in the spring (mid-May to June) or when your "Lawn Program" calls for a surface insect control application. Repeat as the program indicates or as needed for control. Sod Webworm may have 4 generations of larvae which will require additional treatments at 30 to 40 day intervals during the summer months. Therefore, repeat as needed for continued protection of lawn. Lightly sprinkle the area after treatment as soon as possible to move the insecticide into the zone of insect infestation. Do not allow children or pets on treated areas until material has been sprinkled in and the grass is dry.

Surface Feeding Insects - 2 lb/1,000 Sq ft	
Spreader	Setting
Cyclone Pro	4
Cyclone-Rolo	3
Lely B'Cast	2.5
Lesco B'Cast	H
Prize CB-85, CBT-85	4.5
Scott-Drop	4
Scotts R7X	H
Spyker Pro	4
Greenview (Model 105)	6.5
Earthway (Model 2600)	8
Sears Broadcast	3.5
Sears Drop	6
(30 pounds will treat 15000 Sq ft at this rate)	

### WHITE GRUB LARVAE AND MOLE CRICKET CONTROL IN THE TURF

For Root Feeding "White Grub" insect larvae of Japanese Beetle, European Chafer & Southern Chafer apply 3 lb per 1,000 sq ft of turf. For Mole Crickets, apply 3 lb per 1000 sq ft. Make sure your spreader is properly calibrated to apply this product. Irrigate the turf after treatment as soon as possible to wash the insecticide into the root zone where the insects are feeding. Apply when the White Grub Larvae are young and actively feeding near the soil surface in mid-July and early August. Consult your Agricultural Extension Service for the best time to treat for "Grubs" in your area. A second treatment at the same rate may be needed for mature large sized grubs.

#### HOW TO APPLY: IMPORTANT . . .

Do not attempt to control White Grubs or Mole Crickets in turf that has over 1/2 to 3/4 inch thatch build up since heavy thatch will prevent the insecticide from penetrating down to the area where the insects are feeding. Therefore, troublesome thatch must be removed before treating for White Grubs or Mole Crickets. If thatch is not removed before treatment, poor "Grub" and Mole Cricket control will result.

Bayer Corporation  
Professional Care  
Box 4913  
Kansas City, MO 64120-0013  
(800) 842-8020  
<http://bayerprocentral.com>  
DX 0201 BPC Printed in U.S.A.

Root Feeding Insects - 3 lb/1,000 Sq ft	
Spreader	Setting
Cyclone Pro	4.75
Cyclone-Rolo	3.5
Lely B'Cast	2.9
Lesco B'Cast	J
Prize CB-85, CBT-85	5
Scott-Drop	4.5
Scotts R7X	J
Spyker Pro	4.7
Greenview (Model 105)	7.5
Earthway (Model 2600)	10
Sears Broadcast	4
Sears Drop	7
(30 pounds will treat 10000 Sq ft at this rate)	

### STORAGE AND DISPOSAL

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

**STORAGE:** Store in its original container in a cool, dry, locked place out of reach of children.

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

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill.

**HOUSEHOLD:** Do not re-use empty bag. Wrap and put in trash.

M-7976 2/17/94

#### IMPORTANT

Before using this product, read and carefully observe the directions, cautionary statements and other information appearing on the product packaging label. This product is sold subject to the Conditions of Sale set forth on the container label.



**APPENDIX**

**Pertinent Connecticut General Statutes and Regulations for individuals holding an operational certificate:**

**Section 22a-47(f) of the Connecticut General Statutes is the definition of the term "commercial applicator" which includes supervisors and operators.**

Section 22a-47(f) of the Connecticut General Statutes states, "Commercial applicator means any individual, whether or not he is a private applicator with respect to some uses, who uses or supervises the use of (1) any restricted use pesticides or (2) any pesticide on property not owned or rented by him or his employer."

**Section 22a-54(b) explains the difference between a supervisory certificate holder, who is the decision maker, and the operational certificate holder, who applies pesticides only under the instructions of the supervisor.**

Section 22a-54(b) of the Connecticut General Statutes states, "There shall be two classifications for commercial applicators, supervisory and operational. Supervisory certification shall be required for commercial applicators who are responsible for deciding whether or not pesticides are to be employed, how they are to be mixed, where they are to be employed, what pesticides are to be used, the dosages and timing involved in the pesticide use and the methods of application and precautions to be taken in the use of such pesticides. Operational certification shall be required for commercial applicators who actively use pesticides in other than a supervisory capacity".

**Section 22a-54(c)(1) states that you must have the correct type of certification for the job you are performing. To apply for certification you must contact the DEP, Pesticide Management Division. To receive certification you must demonstrate a knowledge of proper pesticide use by passing an examination.**

Section 22a-54(c)(1) of the Connecticut General Statutes states, "No person shall engage in commercial application of pesticides within this state at any time without a certificate issued in accordance with the provisions of this section. No person shall engage in the private application of restricted use pesticides without a certificate issued in accordance with the provisions of this section. Application for such certificate shall be made to the commissioner and shall contain such information regarding the applicant's qualifications and proposed operations and other relevant matters including, but not limited to, a knowledge of integrated pest management and the role of honey bees in agriculture, pesticides that are especially toxic to honey bees, and methods of application which minimize damage to honey bees, as the commissioner may require."

**Regulation Section 22a-66-5(b) is self-explanatory.**

Section 22a-66-5(b) of the Regulations of Connecticut State Agencies states "No person under 18 years of age shall be issued a pesticide certification or license."



**Regulation Section 22a-66-5(g) states that a supervisory license holder must either be present at the time of pesticide application or must send written instructions with the operator doing the application.**

Section 22a-66-5(g) of the Regulations of Connecticut State Agencies states "No commercial application of pesticides shall be made unless a person holding a valid supervisory certificate: (1) is present at the time of application where such presence is required by the labeling; or (2) where labeling does not require the presence of a certified supervisory applicator at the site of application, the certified supervisory applicator must either be present at the time of application or must provide written instruction to the certified operator that shall include the certified supervisor's name and certification number, the certified operator's name and certification number, the pest to be controlled, the pesticide to be used, directions for use of the pesticide, and be available if and when needed."

**Regulation Section 22a-66-5(h) states the criteria for determining who is required to possess an operator's certification.**

Section 22a-66-5(h) of the Regulations of Connecticut State Agencies states "An operator's license shall be required for commercial applicators who actively use pesticides in other than a supervisory capacity including but not limited to:

- (1) a person who applies, mixes or handles pesticides in other than completely closed containers.
- (2) a person who comes in contact with pesticides through drift for more than brief periods.
- (3) a person who assists with the application of pesticides under the supervision of a holder of a supervisory license."

**Statute Section 22a-63(a) states the penalties for violations of the Connecticut Pesticide Control Act.**

Section 22a-63(a) of the Connecticut General Statutes states "Any registrant, commercial applicator, uncertified person who performs or advertises or solicits to perform commercial application, wholesaler, dealer, retailer or other distributor who knowingly violates any provision of this chapter, subsection (a) of section 23-61a, or sections 23-61b to 23-61d, inclusive, shall be fined not more than five thousand dollars, or imprisoned for not more than one year or both."

#### **Important Phone Numbers:**

CONNECTICUT POISON CONTROL CENTER - 800-222-1222

DEP EMERGENCY RESPONSE and 24-Hour Spill Reporting - (860) 424-3338

DEP PESTICIDE MANAGEMENT DIVISION - (860) 424-3369

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# THE UNIVERSITY OF CONNECTICUT COOPERATIVE EXTENSION SERVICE

Fact Sheet No. 1

## Laundering Pesticide Contaminated Clothing

By Candace L. Bartholomew Extension Agent, Pesticides\*

The problem of how to launder pesticide contaminated clothing has puzzled many as pesticide use has become widespread. What is the best method? What water temperature should be used? Is there a difference in detergent performance? Must you be careful about washing contaminated clothes with other clothing?

Use the pesticide label as a guide for knowing which chemicals are more toxic. Key words on all pesticide labels identify the toxicity of the product (Figure 1).

Key Word	Toxicity	Examples*
<b>DANGER</b> <b>POISON</b>	Highly toxic/ concentrated	Counter Disyston Parathion Furadan Dyfonate Lasso
<b>WARNING</b>	Moderately toxic	Diazinon Glyphosate Phosmet Dicamba
<b>CAUTION</b>	Slightly toxic	Ammate Sevin Atrazine Malathion

\*Toxicity of the pesticide may vary depending upon the formulated product. Use the key word as an indication of the toxicity level.

Figure 1

Clothing contaminated with highly toxic and concentrated pesticides must be handled most carefully, as these pesticides are easily absorbed through the skin. If the

clothes have been completely saturated with concentrated pesticides, discard them. Clothing contaminated by moderately toxic pesticides do not warrant such drastic measures. Hazards are less pronounced in handling clothing exposed to low toxicity pesticides. But...the ease of pesticide removal through laundering does not depend on toxicity level—it depends on the formulation of the pesticide. For example, 2,4-D amine is easily removed through laundering because it is soluble in water; 2,4-D ester is much more difficult to remove through laundering.

Disposable clothing helps limit contamination of clothes because the disposable garments add an extra layer of protection. This is especially important when you are in direct contact with pesticides, such as when mixing and loading pesticides for application.

### Laundering Recommendations

Wash contaminated clothing separately from the family wash. Research has shown that pesticide residues are transferred from contaminated clothing to other clothing when they are laundered together. Know when pesticides have been used so all clothing can be properly laundered.

Prerinsing contaminated clothing before washing will help remove pesticide particles from the fabric.

Prerinsing can be done by:

1. presoaking in a suitable container prior to washing;
2. prerinsing with agitation in an automatic washing machine;
3. spraying/hosing garment(s) outdoors.

Prerinsing is especially effective in dislodging the particles from clothing when a wettable powder pesticide formulation has been used.

Clothing worn while using slightly toxic pesticides may be effectively laundered in one to three machine washings. It is strongly recommended that multiple washings be used on clothing contaminated with more toxic or more concentrated pesticides to draw out excess residues. Burn or bury clothing contaminated with concentrated, highly toxic pesticides. Always wear rubber gloves when handling highly contaminated clothing to prevent pesticide absorption into the body.

Washing in hot water removes more pesticide from the clothing than washing in other water temperatures. Remember...the hotter, the better. Avoid cold water washing! Although cold water washing might save energy, cold water temperatures are relatively ineffective in removing pesticides from clothing.

Laundry detergents, whether phosphate, carbonate, or heavy duty liquids, are similarly effective in removing pesticides from fabric. However, research has shown that

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heavy duty liquid detergents are more effective than other detergents in removing emulsifiable concentrate pesticide formulations. Emulsifiable concentrate formulations are oil-based and heavy duty liquid detergents are known for oil-removing ability.

Laundry additives, such as bleach or ammonia, do not contribute to removing pesticide residues. Either of these additives may be used, if desired, but caution must be used. *Bleach should never be added to or mixed with ammonia*, because they react together to form a fatal chlorine gas. Be careful-*don't mix ammonia and bleach!*

If several garments have become

contaminated, wash only one or two garments in a single load. Wash garments contaminated by the same pesticide(s) together. Launder, using a full water level to allow the water to thoroughly flush the fabric.

During seasons when pesticides are being used daily, clothing exposed to pesticides should be laundered daily. This is especially true with highly toxic or concentrated Pesticides. It is much easier to remove pesticides from clothing by daily laundering than attempting to remove residues that have accumulated over a period of time.

Pesticide carry-over to subsequent laundry loads is possible because

the washing machine is likely to retain residues which are then released in following laundry loads. It is important to rinse the washing machine with an *empty load*, using hot water and the same detergent, machine settings and cycles used for laundering the contaminated clothing.

Line drying is recommended for these items. Although heat from an automatic dryer might create additional chemical breakdown of pesticide residues, many pesticides break down when exposed to Sunlight. This also eliminates the possibility of residues collecting in the dryer.

**When Laundering  
Pesticide Contaminated  
Clothing...REMEMBER**

*READ* the pesticide *LABEL* for information.

*DISPOSABLE PESTICIDE CLOTHING* provides extra protection.

*PRERINSE* clothing by:

- \*presoaking in a suitable container;
- \*agitating in an automatic washing machine;
- \*spraying/hosing the garment(s) outdoors.

**WASHING machine settings:**

**Hot** water temperature (140° F/60° C), Full water level, **Normal** (12 minutes) wash cycle.

*REWASH* the contaminated clothing two or three times, if necessary.

Wash *A FEW* contaminated garments at a time using lots of water.

Wash *SEPARATELY* from *FAMILY* laundry.

*DISCARD* (burn or bury) clothing if thoroughly sat-

urated or contaminated with highly toxic pesticides.

**LAUNDER CLOTHING DAILY** when applying pesticide daily.

**RINSE MACHINE** thoroughly after laundering contaminated clothing.

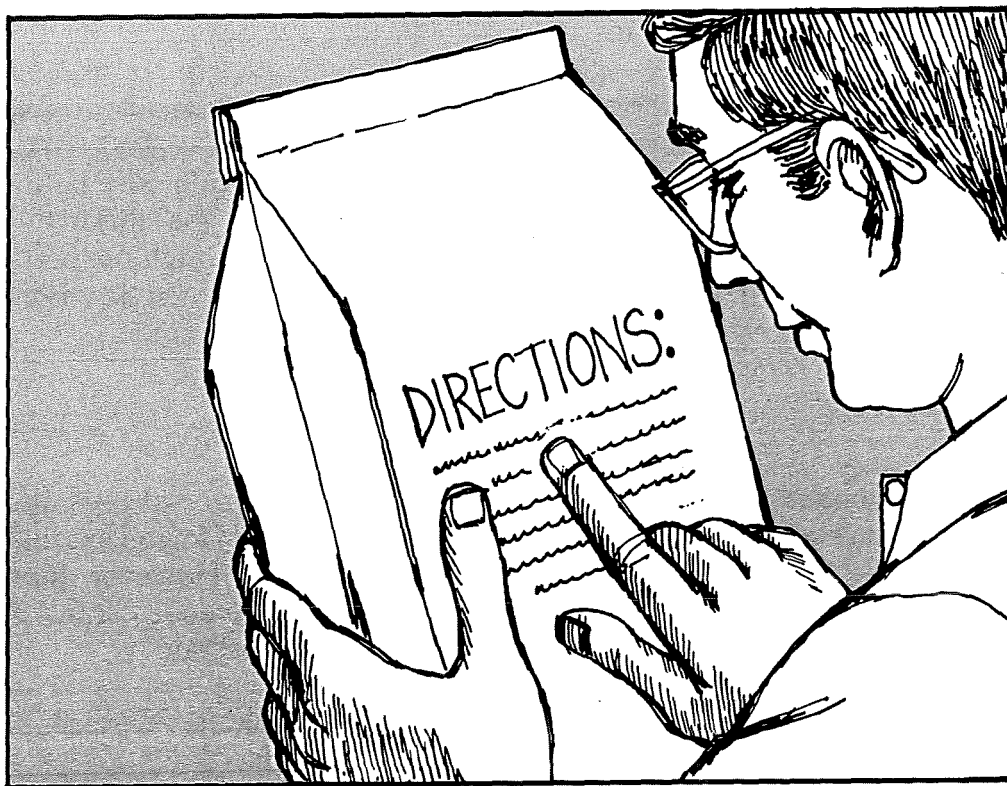
**LINE DRY** to avoid contaminating the automatic dryer.

**BE AWARE** of when pesticides are being used so that clothing can be appropriately laundered.

# The Label

## Chapter XIV

**The pesticide label is extremely important to every user.** The information and instructions on it come from years of costly tests and studies. The label tells you how to correctly use the pesticide. The label, when properly followed, provides protection for applicators, consumers and the environment. Completely read all labels for every pesticide you use. *Don't rely on your memory.*





## Goals of This Chapter

- Learn what kinds of information are on a label and why they are important.
- Learn when and why you should read the label.
- Be able to apply the label information to the use of any pesticide.

## Identification of Chemical Hazards

First, the label identifies the chemicals in the container. The contents are listed in a standard form so that you know exactly what you are applying. Mistaken uses of chemicals can cause crop injury, poor control, or illegal residues. The crop may be unfit for market making you, the applicator, legally responsible for any losses.

②

Signal words are used on most labels to state the toxicity of the pesticide to humans. The label also lists the protective equipment needed for proper handling and use of the chemical. This may include masks, gloves, respirators, etc. The applicator who often works with these chemicals must be especially careful. Don't take chances with your health — follow the simple safety requirements on the label.

## Registered Uses

③

The label lists the uses for the pesticide that are approved by the Environmental Protection Agency (EPA). If the intended use is not on the label, the product should not be used! You are legally responsible for any accident or crop loss which results from using materials which are not approved. Certain formulations of a particular pesticide may be intended for a specific use only, for example, on livestock. The label in this formulation may list only the uses for livestock, even though the pesticide is also registered for other uses. Generally, however, any non-labeled use is a misuse and the applicator may end up in court.

## Recommended Doses

Recommended doses and directions for applying approved uses also appear on every label. These suggestions can be helpful to you because they state the maximum dosage permitted by law. However, local conditions may not require maximum doses to achieve good control of the pest. You should use no more pesticide than is needed.

The label will usually state which other chemicals can be mixed with the pesticide. Often, either pesticides or fertilizers can be combined with the pesticide for one application. Sometimes the chemicals cannot be mixed without destroying their effectiveness. Check on compatibility **before** you mix.

## Compatibility

The label will also tell if the pesticide is phytotoxic and likely to injure plants. Some plants are more sensitive than others to pesticides. The injury to plants can range from slight burning to complete loss of leaves to death of the plant. Choose a pesticide which is not phytotoxic to the target plant.

## Phytotoxicity

The label is the law. Pesticide users are forbidden to use a pesticide in a way contrary to its labeling. Any use not indicated on the label is prohibited. It is also illegal for consultants or sales persons to recommend a pesticide be used contrary to its label. The information found on the label has passed strict government requirements. The label itself, not just the pesticide product, must be registered by the EPA before it is used. EPA reviews and approves each statement which is on the label. The EPA Label Improvement Program updates pesticide labels in areas that contribute to health and environmental safety. According to the program, pesticide manufacturers revise product labels so both the applicator and the regulatory agency can delineate legal uses for pesticides released after April 30, 1988. As part of health and safety, the toxicity warnings on labels come from tests required by the government. The pesticide and the label are registered by EPA only when the applicators, consumers, and fish and wildlife will be protected. If the label statements are carefully followed, no illegal residues will be found on any crop. Applicators, dealers, consultants and salesmen making recommendations other than those recommended on pesticide labels are liable under the law. Getting a single pesticide ready for registration can take seven to nine years and usually costs the chemical company \$20-40 million dollars. Surely if it costs that much, the label is worth reading!

Each pesticide you buy has a label which gives you instructions on how to use the product. Labels vary greatly depending on what the product is used for, when it was issued or reviewed, size of the package, and company format.

## The Label and the Law

## Labeling

Labeling is all the information that you receive from the manufacturer about the product. It includes the label on the product container plus any supplemental information including brochures, leaflets, and information handed out by your dealer or a recognized authority. It is the responsibility of the applicator to comply with all of this information.

## Label

The label is the information printed on or attached to the container of a pesticide.

- To the manufacturer, the label is a "license to sell."
- To the state or federal government, the label is a way to control the distribution, storage, sale, use, and disposal of the product.
- To the buyer or user, the label is a source of facts on how to use the product correctly and legally.
- To physicians, the label is a source of identification and information or proper treatment for poisoning cases.

All labels will tell you how to use the product correctly!

## Parts of the Label

**Brand, Trade, or Product Names.** Each manufacturer has a brand name for their product. Different manufacturers may use different brand names for the same pesticide active ingredient. The brand name shows up plainly on the front panel of the label. Applicators should avoid choosing a pesticide product by brand name alone. Many companies use the same basic name with only minor variations to designate entirely different pesticide chemicals.

For example:

Tersan LSR = zinc and maneb

Tersan SP = chloroneb

Tersan 1991 = benomyl

Tersan = thiram

**Classification.** Every use of every pesticide will be classified by the U.S. Environmental Protection Agency as either "general" or "restricted." Every pesticide product which has been restricted must carry this statement in a prominent place at the top of the front panel of the pesticide label:

"RESTRICTED USE PESTICIDE. For retail sale and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification."

Your state lead agency has the authority to deem a product as restricted use. When a product has been restricted by a state, the "restricted use" statement will not appear on the label. Contact your state lead agency for the list of state restricted use products. When a pesticide is classified for general use, the words "General Classification" will appear immediately below the heading "Directions for Use."

**NOTE:** At the time of this printing, EPA has not completed the classification of the many pesticide products on the market. Therefore, the absence of a RESTRICTED USE statement does not necessarily indicate that the product has a low hazard level. Use the signal word and the precautionary statements to judge the toxicity hazard of all pesticide products.

**Ingredient Statement.** Each pesticide label must list what is in the product. The list is written so that you can see quickly what the active ingredients are and the amount (in percentage) of each ingredient listed. The ingredient statement must list the official chemical names and/or common names for the active ingredients. Inert ingredients need not be named, but the label must show what percent of the total contents they comprise.

**Chemical Name.** The chemical name is a complex name which identifies the chemical components and structure of the pesticide. This name is almost always listed in the ingredient statement on the label. For example, the chemical name of Sevin 50% WP is 1-naphthyl methyl carbamate.

**Common Name.** Because pesticides have complex chemical names, many are given a shorter "common" name. Only common names which are officially accepted by the U.S. Environmental Protection Agency may be used in the ingredient statement on the label. The official common name may be followed by the chemical name in the list of active ingredients. A label with the trade name Sevin 50% WP would read:

Active ingredient:

carbaryl (1-naphthyl methyl carbamate) ..... 50%

Inert ingredients ..... 50%

**Type of Pesticide.** The type of pesticide usually is listed on the front panel of the pesticide label. This short statement usually indicates the kind of pests that the product will control.

Examples:

- Insecticide for control of certain insects on fruits, nuts, and ornamentals.
- Soil fungicide.
- Herbicide for the control of trees, brush, and weeds.
- Algicide.

# **RESTRICTED-USE PESTICIDE**

FOR RETAIL SALE TO AND  
APPLICATION BY CERTIFIED  
APPLICATOR OR PERSONS UNDER  
THEIR DIRECT SUPERVISION.

## **General Classification**

### **ACTIVE INGREDIENT**

Benomyl [Methyl 1-(butylcarbamoyl)-  
2-benzimidazolecarbamate ... **50%**

### **INERT INGREDIENTS ... 50%**

U.S. Pat. 3,631,176

EPA Reg. No. 352-354 AA



**Net Contents.** The front panel of the pesticide label will tell you how much is in the container.

**Name and Address of Manufacturer.** The law requires the maker or distributor of a product to put the name and address of the company on the label.

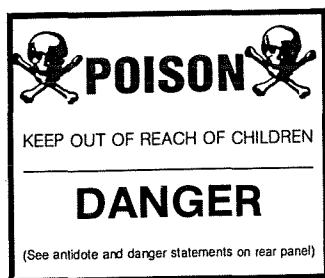
**Registration and Establishment Numbers.** These numbers are needed by the pesticide applicator in case of accidental poisoning, claims of misuse, faulty product, or liability claims.

Xylene.....	30%
Inert Ingredients:	16%
Total:	100%
EPA Reg. No. 100-461 AA	
EPA Est. No. 100-AL-1	

**Registration Numbers.** An EPA registration number appears on all pesticide labels, unless an older label has a USDA number. This indicates the pesticide label has been registered by the federal government. Most products will contain only two sets of numbers, for example, EPA Reg. No. 3120-280; the first set of digits, 3120, is the manufacturer's identification number and the second set, 280, is the product identification number. Sometimes additional letters and numbers are part of the EPA Registration Number, for example 3120-280-AA-0850. The letters AA are alpha (alphabetical) letters required by a particular state and will appear on a few labels. The 0850 is the distributor's identification number and will appear on some labels.

In some cases, special local needs (SLN) pesticide products may be approved by a state. These registrations are designated, for example, as EPA, SLN No. KS-770009. In this case, SLN indicates "special local need" and KS indicates that the product is registered for use in Kansas. SLN numbers may not appear on the package label, but are part of the supplementary label.

**Establishment Numbers.** The establishment number (for example, EPA Est. No. 5840-AZ-1) appears on either the pesticide label or the container. In case something goes wrong, it identifies the facility that produced the product.



**Signal Words and Symbols.** Almost every label contains a signal word that will give you a clue to how dangerous the product is to humans. Knowing the product's hazard helps you to choose the proper precautionary measures for yourself, your workers, and other people (or animals) who may be exposed.

The signal word must appear in large letters on the front panel of the pesticide label. It usually is next to the statement, "Keep Out of Reach of Children" which must appear on every pesticide label.

**DANGER**— Any product which is highly toxic orally, dermally, through inhalation, or causes severe eye or skin burning, will be labeled DANGER. All pesticides which are highly toxic orally, dermally, or through inhalation will also carry the word POISON printed in red and the skull and crossbones symbol. As little as a taste to as much as a teaspoonful taken by mouth could kill an average sized adult.

If a pesticide receives a highly toxic rating because of the possibility for corrosive damage to the skin or eyes, the signal word DANGER will be on the label without the word POISON.

**WARNING** — Any product which is moderately toxic orally, dermally, or through inhalation or causes moderate eye and skin irritation, will be labeled WARNING. A teaspoonful to a tablespoonful orally could kill the average sized adult.

**CAUTION** — Any product which is slightly toxic to relatively non-toxic orally, dermally, or through inhalation or causes slight eye and skin irritation, will be labeled CAUTION. An ounce to more than a pint taken orally could kill the average adult.

**Precautionary Statements.** All pesticide labels contain additional statements to help you decide the proper precautions to take to protect yourself, your helpers, and other persons (or domestic animals) which may be exposed. Part or all of the pesticide label may be written in other languages; the same label requirements apply regardless of the language.

**Route of Entry Statements.** The statements which immediately follow the signal word, either on the front or side of the pesticide label, indicate which route(s) of entry (mouth, skin, lungs) you must particularly protect. Many pesticide products are hazardous by more than one route of entry so study these statements carefully. A "Danger" signal word followed by "may be fatal if swallowed or inhaled" gives you a far different warning than, "Danger: Corrosive — causes eye damage and severe skin burns."

Typical **DANGER** label statements include:

- Fatal if swallowed.
- Poisonous if inhaled.
- Extremely hazardous by skin contact — rapidly absorbed through skin.
- Corrosive — causes eye damage and severe skin burns.

These statements are not uniform on all labels and many variations may be found. More than one, or in some cases all four precautions may be stated on the same label.

Typical **WARNING** label statements include:

- Harmful or fatal if swallowed.
- Harmful or fatal if absorbed through the skin.
- Causes skin and eye irritation.

#### PRECAUTIONARY STATEMENTS

HAZARDS to HUMANS  
and DOMESTIC ANIMALS.

**CAUTION:** Keep out of reach  
of children, pets, domestic  
animals and wildlife.

#### Warning!

Keep out of reach of children.  
See additional warning  
statements on back  
of container.

Statements on a WARNING label may be exactly like those found on a DANGER label or a CAUTION label. There may be a combination of the two, for example "harmful or fatal."

Typical CAUTION label statements include:

- Harmful if swallowed.
- May be harmful if absorbed through the skin.
- May be harmful if inhaled.
- May irritate eyes, nose, throat and skin.

These statements may vary considerably. They usually are more moderate than the statements found on a DANGER label, often using "harmful" instead of "fatal" or "poisonous"; "irritant" instead of "corrosive"; and qualifying the warnings with "may" or "may be." This is in keeping with products having a CAUTION label.

**Specific Action Statements.** These statements usually follow the route of entry statements. They recommend the specific action needed to prevent poisoning accidents. These statements are directly related to the toxicity of the pesticide product (signal word) and route(s) of entry which must be protected.

DANGER labels typically contain statements such as:

- Do not breathe vapors or spray mist.
- Do not get on skin or clothing.
- Do not get in eyes.

(You would not deliberately swallow the pesticide, so the "Do not swallow" statement is omitted.)

CAUTION labels generally contain specific action statements which are much milder than those on the DANGER label:

- Avoid contact with skin or clothing.
- Avoid breathing dusts, vapors, or spray mists.
- Avoid getting in eyes.

These statements indicate that the toxicity hazard is not as great. The specific action statements help you prevent pesticide poisoning by taking the necessary precautions and wearing the correct protective clothing and equipment.

**Hazards to Wildlife.** The label may indicate that the product causes undesirable effects in the environment. In this case, the precautionary statement may tell you what to avoid doing. Some labels indicate toxicity to bees, birds, fish and crustaceans. Labeling may indicate limitations

imposed to protect endangered species. These limitations may include reduced rates, restrictions on types of application, or a ban on the pesticide's use within the species range. The label may also tell you where additional information can be obtained.

**Protective Clothing and Equipment Statements.** Pesticide labels vary in the type of protective equipment statement they contain. Some labels fully describe appropriate protective equipment. A few list the kinds of respirators which should be worn when handling and applying the product. Others require the use of a respirator but do not specify type or model to be used. Many labels carry no statement at all.

You should follow all advice on protective clothing or equipment which appears on the label. However, the lack of any statement or the mention of only one piece of equipment does not rule out the need for additional protection.

The best way to determine the correct type of protective equipment is to use the signal word, the route of entry statements, the formulation, and the specific action statements. Sensible selection of protective equipment depends on a thorough understanding of the pesticide, the job, the weather, the handler and how these factors interact. (See Chapter VII Safety Precautions).

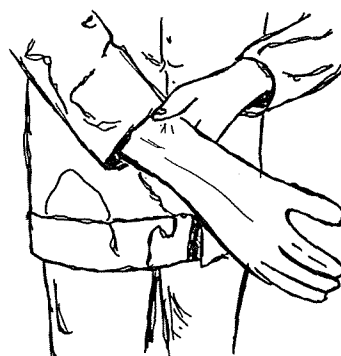
A WARNING label, for example, might carry the statements: "Causes skin and eye irritation. Do not get in eyes, on skin, or on clothing. Wear goggles while handling." Even though the label does not specifically require them, you should wear coveralls over regular work clothing, chemical-resistant gloves, and footwear. You should wear a chemical-resistant protective suit and hat if you will be in prolonged contact with the chemical or are using an overhead spray application.

The safe use of pesticides depends on risk awareness, use of appropriate protective equipment, skill at handling equipment and pesticides, careful personal hygiene, and regular medical care.

**Other Precautionary Statements.** Labels often list other precautions to take while handling the product.

- Do not contaminate food or feed.
- Remove and wash contaminated clothing before reuse.
- Wash thoroughly after handling and before eating or smoking.
- Wash clothes daily.
- Not for use or storage in and around a house.
- Do not allow children or domestic animals into the treated area.

These statements represent actions which an applicator should always follow whether they are on the label or not.







FIRST AID



**First Aid or Statement of Practical Treatment.** These statements tell you the first aid treatments recommended in case of poisoning. Typical statements include:

- In case of contact with skin, wash immediately with plenty of soap and water.
- In case of contact with eyes, flush with water for 15 minutes and get medical attention.
- In case of inhalation exposure, move from contaminated area and give artificial respiration if necessary.
- If swallowed, drink large quantities of milk, egg white, or water — do not induce vomiting.

All DANGER labels and some WARNING and CAUTION labels have a section on First Aid Treatment, Poison Signs or Symptoms, Note to Physicians, or Antidote and an Emergency Assistance Call telephone number. WARNING and CAUTION labels usually do not provide this information, although some may provide an Emergency Assistance Call telephone number near the signal word or precautionary statements. Individuals experiencing poisoning symptoms should seek medical attention. The pesticide label is an extremely important document which should accompany the victim to the treatment facility.

**Environmental Hazards.** Pesticides may be harmful to the environment. Some products are classified RESTRICTED USE because of environmental hazards alone. Label warnings may include groundwater advisories and protection information. Look for special warning statements on the label concerning hazards to the environment.

**Special Toxicity Statements.** If a particular pesticide is especially hazardous to wildlife, it will be stated on the label. For example:

- This product is highly toxic to bees.
- This product is toxic to fish.
- This product is toxic to birds and other wildlife.

These statements alert you to the special hazards that the use of the product may pose. They should help you choose the safest product for a particular job and remind you to take extra precautions.

**General Environmental Statements.** These statements appear on nearly every pesticide label. They are reminders of common sense actions to follow to avoid contaminating the environment. The absence of any or all of these statements DOES NOT indicate that you do not have to take adequate precautions.

Sometimes these statements will follow a "specific toxicity statement" and provide practical steps to avoid harm to wildlife.



Examples of general environmental statements include:

- Do not apply when runoff is likely to occur.
- Do not apply when weather conditions favor drift from treated areas.
- Do not contaminate water when cleaning equipment or disposing of wastes.
- Keep out of any body of water.
- Do not allow drift on desirable plants or trees.
- Do not apply when bees are likely to be in the area.
- Do not apply where the water table is close to the surface.

**Physical or Chemical Hazards.** This section of the label will tell you of any special fire, explosion, or chemical hazards the product may pose. For example:

- Flammable — Do not use, pour, spill, or store near heat or an open flame. Do not cut or weld container.
- Corrosive — Store only in a corrosion-resistant tank.

**NOTE:** Hazard statements (hazards to humans and domestic animals, environmental hazards, and physical-chemical hazards) are not located in the same place on all pesticide labels. Some newer labels group them in a box under the headings listed above. Other labels may list them on the front panel beneath the signal word. Still, other labels list the hazards in paragraph form somewhere else on the label, under headings such as "Note" or "Important." You should search the label for statements which will help you to apply the pesticide safely and knowledgeably.

**Entry Restriction.** Some pesticide labels contain a reentry precaution. This statement tells you how much time must pass before people can reenter a treated area without appropriate protective clothing. These entry restrictions are set by both EPA and some states. Entry restrictions set by states are not always listed on the label. It is your responsibility to determine if one has been set. It is illegal to ignore entry restrictions.

The minimum standard for legal protective clothing for early reentry following agricultural and other outdoor treatments are:

- A long-sleeved shirt
- Long-legged trousers or coveralls
- Hat
- Sturdy shoes with socks
- Gloves are suggested. For early reentry in enclosed areas, a respirator may be necessary.

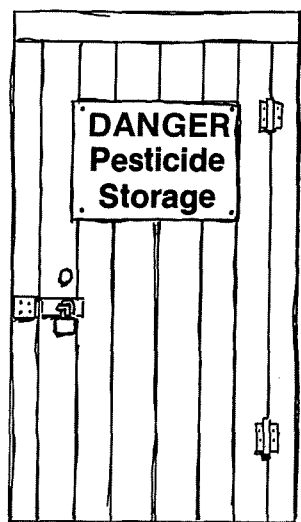
The entry restriction may be printed in any one of several places, such as under "General Information," or "Directions for Use," etc. If no

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

**REENTRY STATEMENT**

Do not enter area within five days after application.

entry restriction statement appears on the label and is not set by your state, then you must wait at least until sprays are dried or dusts have settled before reentering, or allowing others to reenter a treated area without protective clothing. This is the minimum legal reentry interval.



**Storage and Disposal.** All pesticide labels contain general instructions for the appropriate storage and disposal of the pesticide and its container. State and local laws vary considerably, so specific instructions usually are not included. Typical statements include:

- Not for use or storage in or around the home.
- Store away from fertilizers, insecticides, fungicides, and seeds.
- Store at temperatures above 32°F (0°C).
- Do not reuse container.
- Do not contaminate water, food or feed by storage and disposal.
- Open dumping is prohibited.
- Triple-rinse and offer this container for recycling or reconditioning, or dispose in an approved landfill or bury in a safe place.
- Use excess or dispose in an approved landfill or bury in a safe place.
- Do not reuse bag. Burn or bury in a safe place.

You should try to determine the best storage and disposal procedures for your operation and location. These statements may appear in a special section of the label titled "Storage and Disposal" or under headings such as "Important," "Note," or "General Instructions." For additional information on proper pesticide disposal and storage contact your state regulatory agency.

**Directions for Use.** Correct application of a pesticide product is accomplished by following the use instructions found on the label. The use instructions will tell you:

- The pests which the manufacturer claims the product will control. (Federal law legally allows you to apply a pesticide against a pest that is not specified on the labeling if the application is to a crop, animal, or site which the labeling approves. **Your state may not permit such a use.**)
- The crop, animal, or site the product is intended to protect.
- In what form the product should be applied.
- The proper equipment to be used.
- How much to use.
- Mixing directions.
- Compatibility with other often-used products.
- Phytotoxicity and other possible injury or straining problems.
- Where the material should be applied.
- When it should be applied.



Labels for agricultural pesticides often list the least number of days which must pass between the last pesticide application and crop harvest, slaughter, or grazing livestock. These are intervals set by EPA to allow time for the pesticide to break down in the environment. This prevents illegal residues on food, feed, or animal products and possible poisoning of grazing animals. This information may appear as a chart or it may be listed just after the application directions for the target crop or animal.

In the future there may be some directions for use (which pesticide applicators must obey) that are referred to on the label, but may not come with the product when it is sold. Directions by reference may include use instructions required by EPA regulations. As an example, a pesticide label may have a statement like this:

### **Directions for Use by Reference**

"You must use this product in a manner consistent with its labeling and with EPA Worker Protection Standards for Agricultural Pesticides, Part 170 of Title 40, Code of Federal Regulations."

This statement means you are responsible to determine if the regulation applies to your situation and intended use of that pesticide. If the regulation does apply, you are responsible for complying with these directions as well as the label and labeling directions. EPA regulations that may require additional pesticide use directions are:

- agricultural worker protection
- ground and surface water protection
- endangered species protection
- pesticide transportation, storage, and disposal

The use directions for each of the programs above may be long and exceed the room available on the traditional pesticide label. EPA's decision to refer to use directions places great responsibility on the pesticide applicator. A paragraph or a sentence on the label may be the only notice an applicator will receive that more directions are required for proper and legal application of that product.

The applicator must:

- Read the label carefully and recognize statements referring to additional use-directions.
- Locate and read the additional use-directions.
- Determine if they affect the planned use.
- Decide how to comply.
- Comply with the additional directions.

## Reading the Label

**Before you buy a pesticide, read the label to determine:**

- Whether it is the pesticide you need for the job.
- Whether the pesticide can be used safely under the application conditions.
- Where the pesticide can be used (livestock, crops, structures, etc.)
- Whether there are any restrictions for use of the pesticide.
- How much product you need.

**Before you mix the pesticide, read the label to determine:**

- What protective equipment you should use.
- What the pesticide can be mixed with (compatibility).
- How much pesticide to use.
- The mixing procedure.

**Before you apply the pesticide, read the label to determine:**

- What safety measures you should follow.
- When to apply the pesticide (including the waiting period for crops and animals).
- How to apply the pesticide.

**Before you store or dispose of the pesticide or pesticide container, read the label to determine:**

- Where and how to store the pesticide.
- How to decontaminate and dispose of the pesticide container.
- Where and how to dispose of surplus pesticides.