
CHAPTER 7

THE PESTICIDE LABEL

LEARNING OBJECTIVES

After you complete your study of this chapter, you should be able to:

- Distinguish among the terms “common name,” “chemical name” and “brand name” and know which to use to most accurately identify a pesticide product.
- Explain the meaning of “restricted use” classification and explain where to look for the classification on pesticide labeling.
- Interpret the signal words (and symbols) on pesticide labeling.
- Know the types of precautionary statements on pesticide labeling.
- Explain the pesticide user’s responsibility to follow use directions.
- Know what Material Safety Data Sheets are and where to obtain them.

One of the more important tools for safe and effective use of pesticides is the product label. Pesticide manufacturers are required by law to put certain information on the label. Not following that information can result in a pesticide accident and legal action against the violator. Labels are legal documents that provide directions on how to transport, mix, apply, store, and dispose of a pesticide product or its container. This chapter will teach you how to read and apply the information on pesticide labels.

PARTS OF THE LABEL

Some labels are very easy to understand; others are complicated. It is the user’s responsibility to read and understand the label before buying, using, storing or disposing of a pesticide. To help you better understand labels, each of the label components will be discussed in this section. The numbers preceding the descriptions correspond to the numbered parts of the sample label of NO PEST at the end of this chapter.

1. Trade, Brand or Product Names

Every manufacturer has trade names for its products. Most companies register each trade name as a trademark and will not allow any other company to use that name without permission. Different trade names are used by different

manufacturers, even though the products contain the same active ingredient. The brand or trade name is on the front panel of the label and is the one used in advertisements and by company salespersons.

The brand name often indicates the type of formulation and the percent active ingredient. For example, Sevin 50 WP is a brand name of an agricultural product; Sevin is the registered trade name and the formulation is a wettable powder containing 50 percent active ingredient. This product is formulated for agricultural purposes and is not registered for use on animals.

2. Ingredient Statement

Every pesticide label must list every active ingredient and the percentage of it in the container. Inert ingredients are not usually named, but the label must show what percentage of the total contents they make up. The ingredient statement must list the official chemical and common names of the active ingredients. Let’s discuss an example:

Sevin 50 WP
Active ingredient:
carbaryl (1-naphthyl N-methyl carbamate)....50%
inert ingredients.....50%

The **chemical name** is the complex name that identifies the chemical components and structure of the pesticide. This name must be listed in the ingredient statement on the label. For example, the chemical name of Sevin is 1-naphthyl N-methyl carbamate.

Because chemical names are usually complex, many chemicals are given a shorter **common name**. Only those common names officially accepted by the EPA may be used in the ingredient statement on the pesticide label. The official common name is usually followed by the chemical name in the list of active ingredients. The common name for Sevin is carbaryl. By purchasing pesticides according to the common or chemical names, you will be certain of getting the right active ingredient, no matter what the brand name or formulation.

Recognize that even though you have found the correct active ingredient, the product must be labeled for use on animals or it cannot be safely used on animals for pest control. A single active ingredient may be formulated several ways. Only those formulations specifically designated for use on animals can be safely and legally used on animals.

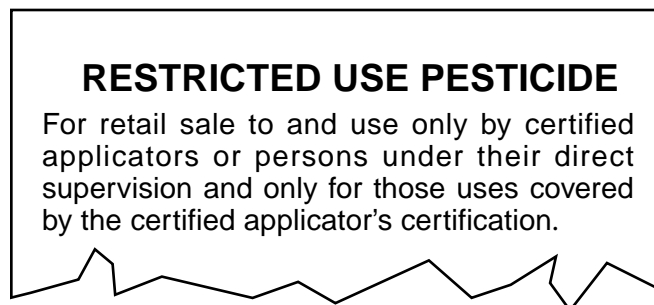


When treating for pests, use only products labeled for use on animals!

3. Use Classification Statements

Every pesticide product is classified by the EPA as either restricted use or unclassified/general use. Every pesticide product classified as restricted use must carry this statement in a

prominent place at the top of the front panel of the pesticide label:



4. Type of Pesticide

The type of pesticide is usually listed on the front panel of the pesticide label. This short statement indicates, in general terms, what the product will control. Examples:

- Insecticide for control of certain insects.
- Herbicide for control of woody brush and weeds.
- Fungicide for control of plant and animal pathogens.

5. Net Contents


The front panel of the pesticide label shows how much product is in the container. This is expressed as pounds or ounces for dry formulations or as gallons, quarts, or pint for liquids. Liquid formulations may also list the pounds of active ingredient per gallon of product.

6. Name and Address of Manufacturer

The law requires that the manufacturer or formulator of a product put the name and address of the company on the label. This tells you who made or sold the product.

7. Registration Numbers

An EPA registration number (e.g., EPA Reg. No. 9999-000-00000) must appear on all pesticide labels. This indicates that the pesticide product has been registered and its label approved by the EPA. In cases of special local needs, pesticide products may be approved for use in a specific state. These registrations are designated, for example, as EPA SLN No. MI-860009. In this case, SLN indicates "Special Local Need" and MI means that the product is registered for use in Michigan.

TOXICITY	HIGH May Cause Death! See a physician immediately.	MODERATE Possible Serious Illness! See a physician if symptoms persist.	LOW or SLIGHT May Cause Illness! See a physician if symptoms persist.
INDICATION ON LABEL	DANGER POISON 	WARNING	CAUTION

The words **DANGER** and **POISON**, **WARNING** or **CAUTION** indicate the toxicity level.

8. Establishment Numbers

An EPA establishment number (for example, EPA Est: No. 9999-TX-1) must also appear on the pesticide label. It identifies the facility that produced the product in case a problem arises or the product is found to have been adulterated in any way.

9. Signal Words and Symbols

Every pesticide label must include a signal word. This important designation gives the user an indication of the relative toxicity of the product to humans and animals. Toxicity is one factor you should consider when choosing a pesticide. The signal word must appear in large letters on the front panel of the pesticide label along with the statement, “Keep Out of Reach of Children.” The following signal words may be found on pesticide labels.

- **DANGER-POISON, SKULL AND CROSSBONES** – These words and symbol must appear (in red letters) on all products that are highly toxic by any route of entry into the body. “Peligro,” the Spanish word for “danger,” must also appear on the label.
- **DANGER** – Products with this signal word can cause severe eye damage or skin irritation.
- **WARNING** – This word signals that the product is moderately toxic orally, dermally, or through inhalation, or causes moderate eye or skin irritation. “Aviso,” the Spanish word for “warning,” must also appear on the label.
- **CAUTION** – This word signals that the product is slightly toxic orally, dermally or through inhalation, or causes slight eye or skin irritation.

Chapter 5, Pesticides and Human Health, further describes signal words.

10. Precautionary Statements

All pesticide labels contain additional statements to help applicators decide what precautions they should take to protect themselves, their employees and other persons (or animals) that could be exposed. Sometimes these statements are listed under the heading, “**Hazards to Humans and Domestic Animals.**” They may be contained of several sections:

Routes of entry statements – The statements which immediately follow the signal word, either on the front or side panels of the pesticide label, indicate which route or routes of entry—mouth, skin, lungs—are particularly hazardous and need protection. Many pesticide products are hazardous by more than one route, 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** followed by “**Corrosive—Causes eye damage and severe skin burns.**”

Specific action statements – These statements usually follow immediately after the route of entry statements. The specific action statements help prevent pesticide poisoning by recommending necessary precautions and protective clothing and equipment. These statements are directly related to the toxicity of the pesticide product (signal word) and the routes of entry.

Protective clothing and equipment statements – Pesticide labels vary in the type of protective clothing and equipment statements they contain. Many labels carry no statement at all. The best way to determine the correct type of protective clothing and equipment is to consider the signal word, the route of entry statements, and the specific action statements on the label.

11. Statement of Practical Treatment

This section lists first aid treatments recommended in case of poisoning.

All **DANGER** labels and some **WARNING** and **CAUTION** labels contain a note to physicians describing the appropriate medical procedure for poisoning emergencies and may identify an antidote. **The label should always be available for emergencies. In the event of a pesticide poisoning, take the label to the hospital with you.**

12. Environmental Hazards

Pesticides can be harmful to the environment. Some products are classified restricted use because of environmental hazards alone. Watch for special warning statements on the label on 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,” or “This product is toxic to fish.”

These statements alert pesticide users to the special hazards posed by use of the product. They should help applicators choose the safest product for a particular job and remind them to take extra precautions.

General environmental statements – Some of these statements appear on virtually every pesticide label. They are reminders to follow certain common sense actions to avoid contaminating the environment. The absence of any or all of these statements does not indicate that you do not need to take adequate precautions. Sometimes these statements follow a “**specific toxicity statement**” and provide practical steps to avoid harm to wildlife. An example of a general environmental statement: “Do not apply when runoff is likely to occur.”

13. Physical or Chemical Hazards

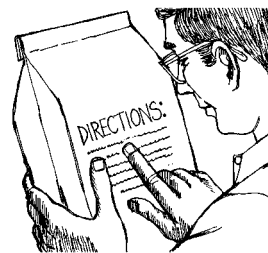
This section of the label describes any special fire, explosion or chemical hazards the product may pose. For example: “Flammable—Do not use, pour, spill or store near heat or open flame. Do not cut or weld container.”

Hazard statements (hazards to humans and domestic animals, environmental hazards, and physical or chemical hazards) are not located in the same place on all pesticide labels. Some labels group them 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.” Before use, examine the label for these statements so you can handle the product knowledgeably and safely.

14. Restricted Entry Interval Statement

Some pesticide labels contain a restricted entry interval precaution. This statement tells how much time must pass before people can reenter a treated area without appropriate protective clothing and equipment. If no restricted entry statement appears on the label or none has been set by your state, then all unprotected workers must wait at least until sprays have dried or dusts have settled before reentering without protective equipment. That is the minimum legal restricted entry interval. For the sample product label we have included in this chapter, the treated animal should not be handled by anyone until the application has dried, or the person should be wearing all the appropriate personal protective equipment.



Read the label!

15. Directions for Use

These instructions are the best way to find out how to apply the product. The use instructions will tell you:

- The host the product is intended to protect.
- The proper equipment to be used and mixing instructions.
- How much to use (rate) and how often to apply.
- Compatibility with other often used products.
- Where and when to apply the material.

Failure to follow the instructions on a pesticide label can result in a serious pesticide accident and constitutes a legal violation subject to civil or criminal prosecution. Remember, the label is a legal document. The user is liable for personal injury, crop damage or pollution that occurs through misuse of a pesticide.

Directions for storage and disposal will also be provided.

16. Regulations

By law, the pesticide label must contain information on how the applicator must comply with the following regulations if the pesticide falls under the stipulation of the particular regulation:

SARA Title III Law Endangered Species Act Worker Protection Standards

For specific information on each of these regulations, see Chapter 1, Pesticide Laws and Regulations. It is advisable to obtain original copies of these documents to understand their contents thoroughly.

ADDITIONAL PESTICIDE INFORMATION – MSDS

In addition to pesticide labels, information about a particular pesticide is printed on a Material Safety Data Sheet (MSDS). These forms include information about the pesticide such as medical conditions that it may aggravate, whether it is carcinogenic and what are its primary routes of entry. The MSDS is available from chemical dealers and dated to help you determine if the information is current.

3 RESTRICTED USE PESTICIDE

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.

Chemco

1 NO PEST

Insecticide 4

SPONGE-ON DIP FOR DOGS

2 ACTIVE INGREDIENT:
N-(Mercaptomethyl) phthalimide S-(O, O-Dimethyl phosphoro-dithioate)
.....11.60%
INERT INGREDIENTS: 88.40%
Total 100%

5 *Contains aromatic petroleum solvent

7 4 FL.OZ.(118 ml)

EPA Reg. No. 9999-000-00000 **8** EPA Est. 9999-TX-1

10 PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS-WARNING: Do not get in eyes, on skin or clothing. Harmful if swallowed, inhaled or absorbed through skin. Use only in well ventilated areas. Applicators must wear long-sleeved shirt, long pants, elbow-length waterproof gloves, waterproof apron and unlined, waterproof boots. Wash all contaminated clothing with soap and hot water before reuse. Wash thoroughly before eating, drinking or using tobacco. Do not use on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhibiting drugs, pesticides or chemicals. Do not use this pesticide on sick, old or debilitated pets. Improper dilution of this product could cause serious injury to dogs.

12 ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds and extremely toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of waste. This product is highly toxic to bees.

11 STATEMENT OF PRACTICAL TREATMENT: If in eyes, rinse immediately with plenty of water, contact a physician immediately if irritation persists. If on skin, wash promptly with soap and water. Remove contaminated clothing. If swallowed, call a physician or poison control center immediately. Do not induce vomiting. If inhaled, remove victim to fresh air. Apply artificial respiration if necessary.

NOTE TO PHYSICIAN/VETERINARIAN: NO PEST is an organophosphorus insecticide and cholinesterase inhibitor. Atropine is antidotal. 2-PAM is also antidotal and may be administered with atropine. Usual symptoms of organophosphorus in man include headache, blurred vision, weakness, nausea, discomfort in chest, vomiting, abdominal cramps, diarrhea, salivation, sweating and pinpoint pupils. Usual symptoms in animals include salivation, labored breathing, ataxia and pinpoint pupils.

13 PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame. Protect from temperatures below 20 degrees F.

15 DIRECTIONS FOR USE – It is a violation of federal law to use this product in a manner inconsistent with its labeling. **Fleas, Ticks and Sarcoptic Mange:** Mix 1 oz. (2 tsp.) NO PEST with 1 gal. water. Dip dog until skin is wet, allow to shake dry. Do not rinse. Reapply as necessary but not more often than every 7 days. Do not treat dogs under 8 weeks of age.

Storage & Disposal: Store in original container, away from children. Do not contaminate water, food or feed by storage or disposal. Do not reuse container. Rinse thoroughly before discarding in trash.



KEEP OUT OF REACH OF CHILDREN
9 WARNING

READ ALL DIRECTIONS AND PRECAUTIONS BEFORE USING

See back panel for Note to Physician/Veterinarian

Sold by Chemco Corporation-East Lansing, MI 48823

6 For information, call 1-800-999-0000



Chapter 7 – Review Questions

Write the answers to the following questions and then check your answers with those in the back of this manual.

1. Labels are legal documents. True or False?
2. Regardless of the signal words they bear, all pesticide labels must carry the words, “**Keep Out of Reach of Children.**” True or False?
3. The skull and crossbones symbol must appear on every pesticide label. True or False?
4. Which signal word(s) on a pesticide label would indicate that the product is highly toxic to humans?
 - a. “WARNING”
 - b. “CAUTION”
 - c. “Keep Out of Reach of Children”
 - d. “DANGER-POISON”
5. Labels should be removed from pesticide containers and kept in a notebook so they remain clean and legible. True or False?
6. A certain active ingredient has only one technical chemical name and one accepted common chemical name, but it may be in products with several different trade/brand names. True or False?
7. What are Material Data Safety Sheets and where can you obtain them?
8. Should a face shield or goggles be worn when handling “NO PEST?” Yes or No?
9. If a person accidentally swallows several mouthfuls of “NO PEST” concentrate, should he/she be immediately administered Syrup of Ipecac to induce vomiting? Yes or No?
10. Regardless of the container material (glass, metal or plastic), all empty “NO PEST” containers should be:
 - a. burned.
 - b. punctured.
 - c. reused.
 - d. triple- or power-rinsed.
 - e. saved.
11. Containers of “NO PEST” can be kept in the kitchen as long as the storage area is locked. True or False?
12. Could use of this product present a hazard to any wildlife or other nontarget animals? Yes or No? List three groups of animals of particular concern:
 - 1.
 - 2.
 - 3.
13. After treating a dog with “NO PEST,” it should remain on the animal for 5 minutes and then be thoroughly rinsed off. True or False?