Reading a Pesticide Label

Why are labels important?

Labels are legal documents providing directions on how to mix, apply, store, and dispose of a pesticide product. This means using a pesticide in a manner inconsistent with its labeling is a violation of federal law.

The label is the manufacturer’s main way to give the user information about the product.

Always remember to read the label when . . .
What information does the front of the label contain?

**Brand Name**
Different names are used by different manufacturers even though their products contain the same active ingredients. The brand name (or trade or product name) is a unique name used to advertise the product.

**Product Type**
Listed under the brand name, this indicates in general terms what the product will control. Here are two examples:
- herbicide for the control of woody brush and weeds, and
- insecticide for control of certain insects on fruits, nuts, and ornamentals.

**EPA Registration Number**
Indicates that the pesticide product has been registered and its label was approved for sale by the Environmental Protection Agency (EPA).

**EPA Establishment Number**
Identifies the facility that produced the product.

**Manufacturer Name and Address**
Provides the manufacturer’s contact information in case you want more information about the product, such as a Material Safety Data Sheet (MSDS) that provides detailed toxicity information, chemical properties, and precautions needed for emergency personnel.

**Ingredient Statement**
Provides the common and/or chemical name and amount of each active ingredient and the total amount of inert ingredients in the container.

**Active Ingredient**
The chemical(s) responsible for controlling the pest. Individually listed on the label by common name and/or chemical name and percentage in the product.

**Common Name**
A simpler name given by the EPA to a chemical name for easier recognition.

**Chemical Name**
The complex name identifying the chemical components and structure of a chemical.
Inert Ingredients
Not required to be individually listed, but their percent of content must be.

Net Contents
The amount a full container holds.

Signal Words
*Signal words indicate the relative acute toxicity of the product to humans and animals.* The statement, KEEP OUT OF REACH OF CHILDREN, must also appear above the signal word on the label. If two products will control the same pest, signal words can help you choose the least toxic chemical to control the pest.

**DANGER**____POISON____—Highly toxic by any route of entry into the body. Peligro, the Spanish word for danger, must also appear on the label.

**DANGER**—Can cause severe eye damage or skin irritation.

**WARNING**—Moderately toxic either orally, dermally, or through inhalation; causes moderate eye or skin irritation. Aviso, the Spanish word for warning, must also appear on the label.

**CAUTION**—Slightly toxic either orally, dermally, or through inhalation; causes slight eye or skin irritation.

What other information can be found on the label?

**Precautionary Statements**
Information about possible hazards. Additional information can be found in the MSDS.

**Hazards to Humans and Domestic Animals**
Describes the potential hazards to people and pets, and actions you can take to reduce those hazards, for example, wearing gloves. These statements may also provide extra information on how to protect children and pets.

**Environmental Hazards**
Describes the product’s potential to harm wildlife, fish, endangered plants and animals, wetlands, or water.

**Physical and Chemical Hazards**
Describes any special fire, explosion, or chemical hazards the product may pose.

**First Aid or Statement of Practical Treatment**
Details what to do if someone is accidentally poisoned by a pesticide. ALWAYS call the National Poison Center Hotline (1-800-222-1222) for further medical instructions. Since the label has specific instructions and information the physician will need, it is important to have the pesticide label available when calling the hotline or when taking someone to the hospital.
Directions for Use

It is a violation of federal law to use any pesticide in a manner inconsistent with its labeling. This section on the label tells you how to properly use a product to get the best results without harming yourself, others, and the environment. The label’s directions for use will tell you:

- What pests the product is registered to control
- Where the product can be used (plants, animals, locations)
- How to apply the product
- How much product to use
- When the product should be applied
- How often to apply the product
- How soon the crop can be used or eaten after an application
- When people and animals can re-enter a treated area after application

Make sure the product is labeled for use against the pest(s) that you are trying to control. (For example, a product labeled only for termites may not be labeled to control fleas.) Also, make sure the product is only used where (plants, animals, locations) the label indicates. (For example, a pesticide labeled for use in an azalea bed may not be labeled for use in an annual flower bed.) Use only the amounts recommended, and follow the directions exactly.

Storage and Disposal

Explains how to best store the product and what to do with the unused portion of the product and the empty container. Always keep products in original containers, out of the reach of children, and in a locked storage area. Be aware that temperature can affect product quality and environmentalsafety. Do not contaminate food or foodstuffs. To dispose of the container, triple-rinse, puncture, and dispose of it according to your local solid waste authority’s requirements.

For More Information

Contact your county Penn State Extension office:
extension.psu.edu/counties
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Read the label! Use pesticides safely when they are necessary!

Updated by the Penn State Pesticide Education Program. Original text prepared by Richard H. Johnson Jr., former extension associate.