

Pesticides: Read the Label



A pesticide label is not just an inconvenient wrapper on a container. It is a legal document produced after years of research and millions of dollars are spent to support that research. A chemical label is designed to show how you can get optimal performance from the product while protecting yourself, others, and the environment. Using the pesticide implies that you have read and understood the label, which relieves the manufacturer of any liability if the chemical is used improperly. Because the label is such an important document, make sure you understand all of the information on it.

Origin of a Label

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act give authority to the Environmental Protection Agency (EPA) for registration and regulation of pesticide use. Presently, up to \$10 million may be spent on tests by a manufacturer in order to have a pesticide registered for use on crops. The EPA studies health risks, environmental effects, and impact on endangered species to determine if the chemical should be sold. If the EPA accepts the pesticide, all directions for use, affected pests, health hazards, and environmental precautions are described in a usable form and printed on the label.

Label Contents

Important data is displayed prominently on the front of the chemical label. Most easily seen is the brand name of the product, a signal word, and a word stating herbicide, fungicide, or insecticide, etc.

The formulation symbol appears near the brand name of the pesticide. Formulation is the form the pesticide is in, e.g., liquid or solid. The symbol may appear as one or two letters, such as L for liquid or EC for emulsifiable concentrate.

The active ingredients are listed near the brand name and formulation symbol. The percentage of active and inert (nonactive) ingredients is listed under the signal word Caution, Warning, or Danger. These words indicate how toxic, or dangerous, the chemical is.

Caution means swallowing one ounce to one pint of the chemical could kill an average-sized adult (150-pound male). **Warning** means swallowing one to three teaspoons of the chemical could kill an adult. **Danger-Poison** or **Danger** means that only one to three swallowed drops may kill an adult. The toxicity of the pesticide and the signal word are based on the ingredients contained in the pesticide. The more toxic a chemical, the more carefully it should be handled.

Directions for Use

A section on the label contains necessary directions for uses of the pesticide. The label lists specific pests controlled by the chemical and crops on which the pesticide may be used. The directions give mixing and application rates. Areas where use of the chemical is forbidden, e.g., schools, parks, gardens, and playgrounds, may also be listed. Instructions on worker notification also appear in this section. All instructions needed for proper application of the product are included in the directions for use.

Field Entry Requirements

In accordance with the 1992 Worker Protection Standard, pesticide labels contain instructions for entry into recently treated fields. The label gives the length of time during which activity in the field is to be limited.

Workers are to be notified of recent pesticide application. Specific notification instructions are included on the label. Both of these requirements are discussed in detail in Extension Publication 1866 *Worker Protection Standard Overview*.

Precautionary Statements

This section includes specific safety precautions to use with the pesticide. The statements may include warnings about specific areas of the body that may be susceptible to harm by this pesticide. Necessary items of personal protective equipment are listed on the label. Protective equipment is discussed in detail in Extension Publication 1843 *Personal Protective Equipment*.

Statement of Practical Treatment

The statement of practical treatment includes first aid for chemical accidents. It is critical to read and understand this section before attempting to give an accident victim first aid. The statement includes instructions on whether or not to induce vomiting and where to call to get emergency help. It may also contain information concerning treatment if the pesticide is spilled or splashed onto the body or into the eyes.

Be sure to take the label when seeking professional medical treatment. This section will contain antidote information doctors will need during an emergency. The medical staff will also need the active ingredients and formulation found on the label. First aid for chemical injuries is discussed in detail in Extension Publication 1862 *Pesticide Injuries and First Aid*.

Storage and Disposal

Instructions on storage and disposal of pesticides and containers are found on the label. Instructions to mix only the necessary amount of pesticides may be included in the statements. Containers must be triple or pressure-rinsed, and the rinsate should be poured onto the treated field. Dispose of containers through a recycling program or in an approved sanitary landfill. Never burn or bury empty pesticide containers.

Environmental Hazards

Environmental hazards include the toxic effects on wildlife and the environment. Bees, birds, and fish are often the most susceptible to poisoning by an accidental release of a pesticide. Take care to avoid applying or accidentally spilling any chemical near a beehive or water supply. Livestock and pets can be harmed by toxins, and care should be taken so nearby animals are not poisoned.

Consider weather conditions before making an application. Suitable conditions for pesticide application are defined on the label.

Before using any pesticide,



and read the label.

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