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G89-937 The Pesticide Label

Larry D. Schulze

University of Nebraska - Lincoln, lschulze1@unl.edu

Shripat T. Kamble

University of Nebraska--Lincoln, skamble1@unl.edu

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The Pesticide Label

This NebGuide describes the parts of a pesticide label to aid understanding and promote safe and effective use of pesticide products.

Larry D. Schulze, Extension Pesticide Coordinator
Shripat T. Kamble, Extension Specialist Pesticide Impact Assessment

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Pesticide information can be provided to end users through labels and labeling. Not all pesticide products have labeling. While the words are similar, they have distinctly different meanings.

Labeling

Labeling, as provided by the manufacturer, gives additional information concerning the pesticide product. Labeling includes booklets, brochures, flyers and other information distributed by the pesticide dealer or manufacturer. Labeling also may include information provided by the Environmental Protection Agency (EPA) on maps indicating the habitats of endangered species.

Label

Now, what about the label? The label is the printed information on or attached to the pesticide container. The label contains specific information of interest to various parties.

For example, to the manufacturer the label means the product may be sold and distributed with approval from the EPA. State and federal governments rely upon the label to control the distribution, storage, sale, use and disposal of the pesticide.

The buyer and user of the pesticide learn how to use the product correctly and legally from the label. Physicians may depend upon the label for information for proper medical treatment in poisoning cases.

For the applicator, the label provides guidelines for correct application and use of the pesticide. The label identifies the classification of the pesticide as either general or restricted use, and the specific sites

for the intended applications.

By law, a pesticide can only be applied to a site identified on the label, even though specific pests may not be indicated. A site can be a crop, animal or location the product is intended to protect.

Pesticide Label Requirements

The manufacturer is required by law to furnish certain information on the label. The information includes the brand name or trade name of the product, the ingredient statement, the percentage or amount of active ingredient(s) by weight, the net contents of the container, and the name and address of the manufacturer.

Other required parts of the label are the registration and establishment numbers, signal words and symbol, precautionary statements, statement of practical treatment, environmental hazard statement, classification statement, directions for use, re-entry statement as necessary, harvesting and/or grazing restrictions, and storage and disposal statement. Following are details on the parts of the label, which are numbered for identification on the sample hot link.

1. **Brand, trade, or product name:** A single pesticide active ingredient may be marketed at the same time under several brand names. Each label may designate a different use of the product. A specific brand name, usually registered as a trademark, will identify a product as produced by a particular manufacturer.
2. **Ingredient statement:** Every pesticide product label must include the active and inert ingredients. The amounts (percentage by weight) of the ingredients are also printed on the label. Often, the *chemical name* of the active ingredient is stated. If an approved *common name* of the active ingredient exists, it may be listed and followed by a chemical name. Brand or trade names are indicated on the front panel of the label and are used in advertisements, by company representatives and pesticide dealers. The names of inert ingredients sometimes are not stated, but the label must indicate their percentage to the total contents.

Net weight or measures of content: The net contents are displayed prominently on the front of the label. Net weight often is expressed as fluid ounces, pints, quarts or gallons for liquid formulations. If the formulation is dry, semi-solid, viscous or pressurized, or a mixture of solid and liquid, the contents are expressed in ounces and/or pounds. Sometimes, the liquid formulations also list the pounds of active ingredient per volume of the product. Net contents may be expressed in metric units.

3. **Manufacturer:** The name and address of the manufacturer, registrant or formulator who makes the product must be printed on the label. If the registrant's name appears on the label and the registrant is not the manufacturer, it must be qualified by appropriate wording such as "packed for...", "distributed by...", or "sold by...".
4. **Registration number:** An EPA registration number is proof the label was approved by the U.S. Environmental Protection Agency before sale in the marketplace. In the case of a special local need registration, a pesticide product may be approved in a specific state for additional usage. This type of registration number is designated as EPA SLN No. NE __ __ __ __ and means the product is registered in Nebraska.
5. **Establishment number:** An establishment number identifies the specific facility that produced

the product. A given pesticide product with the establishment number can be traced to the manufacturing plant of origin. This information is beneficial if problems occur with the product or if it has been found to be adulterated.

6. **Classification statement:** All uses of pesticides are classified on the basis of hazards, the intended use, and the effect upon the environment. pesticide use is classified either for "general use" or "restricted use."

General use pesticides are less likely to harm the user(s) and/or environment when used according to the label. Restricted use pesticides have a greater potential to harm the environment or the applicator when not used as directed.

Training and certification is required for an applicator to purchase, apply or supervise the application of a "restricted use" pesticide.

7. **Directions for use:** The instructions for applying the pesticide are most important. These directions provide the rate of application, the site (crop, animal, location, etc.) the product is intended to protect, the pests controlled, mixing directions, when and where the material is to be applied, and the necessary application equipment. A preharvest interval (in days) may be listed, especially if the product is to be used on crops or vegetables. This time period must pass after a pesticide application before harvest or grazing by animals can occur. The waiting period after application may vary with the type of livestock.
8. **Signal words and symbol:** Each label will display a prominent signal word that indicates the relative toxicity of the active ingredient to humans. The three signal words, in order of increasing toxicity, are **caution**, **warning** and **danger**. A signal word must appear on the front panel of the label.

A product with a signal word **caution** would require an ounce to more than a pint to kill an average person. Products with a **caution** signal word are slightly toxic orally, dermally or through inhalation. They may cause slight eye and skin irritation. A lethal dose for a product with the signal word **warning** generally would be one teaspoon to one tablespoon. Products in this category are moderately toxic. Highly toxic products with the signal word **danger** only require a taste to a teaspoonful of the product to be lethal to an adult. The word "*poison*" and the "*skull and crossbones*" symbol also are associated with products having the **danger** signal word. Products with a **danger** signal word are highly toxic orally, dermally, or through inhalation. They may cause severe eye and skin irritation.

9. **Precautionary statements:** These statements guide the applicator in taking proper precautions to protect humans or animals that could be exposed. Sometimes these statements are listed under the heading "**Hazards to Humans and Domestic Animals.**" Other statements may be under several headings.

Route of entry statement: Pesticides may enter the body in three ways: 1) through the skin (dermal); 2) in the lungs (inhalation); 3) by mouth (oral). A route of entry statement suggests the route(s) more likely for a specific product and suggests specific actions to prevent exposure.

Protective clothing and equipment statements: Guidelines and/or requirements specifying the correct type(s) of protective equipment are found in this portion of the label. Although not required to be on every label, protective clothing and equipment guidelines commonly are

provided for the safety of the applicator. The toxicity of the product influences the selection of the clothing and equipment.

Every pesticide label must include the statement "**Keep out of reach of children**" on the front panel. This warning must be heeded.

10. **Statement of practical treatment:** First aid treatment guidelines are recommended in this statement in case of over-exposure. These guidelines are very concise.

This information should be read before the product is used, and again in case of emergency. For example, a statement may read: "*In case of contact with skin, wash immediately with plenty of soap and water.*" The label contains a "Note to Physicians" describing the appropriate medical procedure for poisoning cases, and may indicate an antidote.

11. **Environmental hazard statement:** This statement includes commonsense reminders to avoid contamination of the environment. Special warning statements on the label cover hazards to the environment. Examples include, "*This product is highly toxic to bees*", or "*This product is highly toxic to fish*," and, "*Do not allow drift to contact non-target plants or trees.*"
12. **Re-entry statement:** Some labels may contain a precaution to protect people after a pesticide application. This statement indicates how much time must pass before a person can re-enter a treated area without appropriate protective clothing.
13. **Storage and disposal statement:** Upon purchase, the storage of the pesticide and the disposal of the empty container is an important responsibility. Use the best storage and disposal guidelines for the specific situation and location. Pesticide inventories should be stored securely, preferably under lock and key, and separate from food and feed supplies. State and local laws may include additional requirements, especially for proper pesticide disposal procedures.

The pesticide label is more than just a piece of paper. It's a legal document recognized by courts of law. The applicator assumes certain responsibilities upon purchase of the product. Applicators should read and follow the pesticide label. Read the pesticide label before a purchase, before mixing, before applying, and before storing or disposing of the excess pesticide or empty containers.

Follow all label directions for effective, safe and legal use of pesticides.

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