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Reading A Pesticide Label Michigan State University Extension Service Rebecca Hines, Pesticide Education Program; Michael Kamrin, Institute for Environmental Toxicology June 2000 6 pages

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Reading a Pesticide

Label

Rebecca Hines Pesticide Education Program Michigan State University and Michael Kamrin Institute for Environmental Toxicology Michigan State University



esticide labels provide information for safe and effective use of pesticides. Labels are legal documents. Pesticide users are required by law to comply with the instructions in the pesticide labeling. The pesticide label contains directions on how to properly mix, apply, store and dispose of a pesticide. Safety information such as type of required personal protection equipment (PPE); worker protection standards (WPS) if applicable; physical and chemical hazards; environmental hazards; and a statement of practical treatment (first aid) must also be present on the label. These directions are designed to ensure the safe and effective use of pesticides. Failure to comply with the directions can harm humans and the environment as well as lead to possible legal liability.

Below is a descriptive list of the information that is found on a pesticide label. A fictitious sample label follows to illustrate how this information might appear.

NAME OF PRODUCT

BRAND NAME

- Name used by the manufacturer to identify the product.
- Every product has a unique brand name.

COMMON NAME

- A simple name given to a chemical with a complex scientific name.
- Common names do not differ with manufacturers.

INGREDIENT STATEMENT

- Percentages of active and inert (other) ingredients in the product.
- Chemical and/or common names of active ingredients MUST BE listed.



- Total amount of product in the container.
- Net contents are expressed in ounces, pounds, gallons, quarts, pints, or fluid ounces.

MANUFACTURER NAME AND ADDRESS

Name and address of producer or distributor of the product.

5 REGISTRATION AND ESTABLISHMENT NUMBER

- Environmental Protection Agency (EPA) registration number indicates the product and label are approved for use by the EPA.
- Establishment number is the code for the factory where the product was made.

6 SIGNAL WORD AND SYMBOL

- Indicates relative acute toxicity of the product.
- Acute toxicity is measured by testing five methods of exposure: acute oral, acute dermal, acute inhalation, eye irritation, and skin irritation.

DETERMINING SIGNAL WORDS

To establish how toxic (poisonous) a pesticide is, it is given to test animals to determine the amount of the chemical that kills 50% of the animals. Toxicity tests are done for each method of exposure — oral, dermal, and inhalation. Based on this and other tests, the product is classified into toxicity categories for each route of exposure. Toxicity categories I, II, III and IV indicate how toxic the chemical or product is. Category I is most toxic and category IV is least toxic.

The toxicity categories help to determine the product's signal word. Signal words are required to appear on every pesticide label. Signal words provide a quick indication of the overall toxicity of the product. Table 1 lists the signal words. Note that the sample pesticide falls into toxicity category I according to the toxicity rating scale, and therefore the words DANGER-POISON appear on the label. For any product in category I, the words DANGER-POISON and the skull and crossbones symbol must appear in red letters on the label. The signal word must also appear in Spanish.

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

■ Ways the product may be poisonous and how to avoid poisoning.

Personal Protective Equipment (PPE)

- Minimum personal protective equipment for example, gloves - required when applying or handling the product.
- See "Agricultural Use Requirements" for early entry PPE requirements.

User Safety Recommendations

- Personal safety information regarding the product.
- "Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet."
- "Remove PPE immediately after handling this product. Wash the outside of gloves before removing. "

Environmental Hazards

Potential hazards to water, soil, air and wildlife if the product is used improperly.

Physical or Chemical Hazards

■ Indicates if the product may pose any fire, explosion or chemical hazards.

12 STORAGE AND DISPOSAL

- Proper storage and disposal of unused pesticide and empty pesticide containers.
- For example, some products have special restrictions such as "Do not store below 32° F."
- Remember: DO NOT REUSE EMPTY CONTAINERS.

CLASSIFICATION STATEMENT

The EPA classifies all pesticides as either general or restricted use. General use pesticides are less likely to cause harm when used improperly. Restricted use pesticides (RUP) have a greater potential to harm the environment or the user. Therefore, RUP labels must have the following statement on the top front panel: "RESTRICTED USE PESTICIDE: For retail sale to and use by only certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator certification."

For more information. contact your county Extension office or:

Pesticide Education Program B18 Food Safety and Toxicology Building Michigan State University East Lansing, MI 48824

517-353-8811



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TABLE 1. TOXICITY RATING SCALEFOR PESTICIDES.

	If the label has this signal word	then, the product is this toxic.
Category	Signal word required on label	Approximate amount needed to kill an average adult
I Highly toxic	DANGER-POISON (PELIGRO)	A few drops to 1 teaspoon
II Moderately toxid	WARNING (AVISO)	1 teaspoon to 1 ounce
ш	CAUTION	Over 1 ounce Low toxicity
IV	CAUTION	Over 1 ounce Slightly toxic

7 CHILD HAZARD WARNING

The statement "KEEP OUT OF REACH OF CHIL-DREN" appears on every pesticide label.

8 STATEMENT OF PRACTICAL TREATMENT (FIRST AID)

- Emergency first aid for pesticide exposure.
- First aid actions for each route of exposure (oral, dermal, inhalation, eye and skin) are given.

DIRECTIONS FOR USE

- How to properly use the product within its legal requirements to get the best results.
- The directions will tell you:
 - •What the product is registered to control (pests).
 - •Where the product can be used (crops, 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 may be used or eaten after an application (preharvest interval - PHI).
- •When people can re-enter a treated area after an application (re-entry statement). Labels will give either a specific amount of time, such as 48 hours after application, or a general re-entry statement such as "Do not enter treated area until sprays have dried or dusts have settled."

10 AGRICULTURAL USE REQUIREMENTS

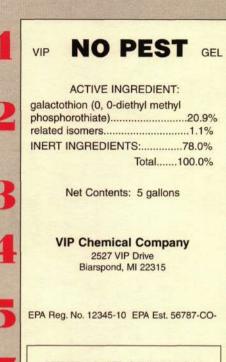
■ Contains requirements for compliance with Worker Protection Standards (WPS).

WORKER PROTECTION STANDARDS (WPS)

The Worker Protection Standards are designed to protect pesticide applicators and handlers and agricultural workers from pesticide poisoning. To comply with WPS, a product label must list the following:

- A restricted entry interval (REI), the time period immediately following a pesticide application during which entry into the treated area is not allowed, with narrow exceptions.
- If a pesticide handler or agricultural worker must enter the treated area during the REI (the exceptions), then the label will state the personal protective equipment (PPE) — for example, gloves — required for early-entry workers.
- All workers must be notified when and where a pesticide application occurs. The type of notification required — oral, written, or oral and written — must be specified.

To learn more about WPS and how to comply, see The Worker Protection Standard for Agricultural Pesticides — How To Comply, EPA Publication No. 735-B-93-001.



KEEP OUT OF REACH OF CHILDREN

DANGER POISON

Si Usted no entiende la etiqueta, busque a alguien para se la explique a Usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

Contact a doctor (physician, clinic, or hospital) immediately in cases of suspected poisoning. Explain that the victim has been exposed to galactothion and describe his/her condition. After first aid is given take victim to clinic or hospital. If breathing has stopped, start artificial respiration immediately and maintain until doctor sees victim.

If swallowed: Induce vomiting and seek medical attention immediately.

If on skin: Wash skin thoroughly with soap and water.

If inhaled: Remove to fresh air.

If in eyes: Hold eyelids open and flush with plenty of water. Call a physician if irritation persists.

DIRECTIONS FOR USE

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

VIP NO PEST is an insect control product for control of lepidopterous larvae (worms and caterpillars), thrips, and leafminers infesting fruits (apples, oranges, lemons and limes) and vegetables (broccoli, cabbage, spinach, tomato, and pepper). VIP NO PEST should be mixed with water and applied as a foliar spray with aerial or ground equipment for a finished spray volume of 30 gallons per acre. Apply product at the first sign of insect damage and continue applications as necessary to maintain control, but not more often than each 14 days. Do not apply within 14 days of harvest.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR

Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of

agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label and personal protective equipment (PPE), notification-to-workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours. The REI is 72 hours in outdoor areas where the average annual rainfall is less than 25 inches a year.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food, or feed by storage or disposal. Do not store under conditions which might adversely affect the container or its ability to function properly.

STORAGE: Do not store below temperature of 0°F.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedure approved by state and local authorities.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

DANGER: Fatal if absorbed through skin, fatal if swallowed, and poisonous if inhaled.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instruction for category G on an EPA chemical resistance category selection chart.

Applicators and Other Handlers must wear:

-Coveralls over long-sleeve shirt & long pants

-Chemical-resistant gloves such as barrier laminate or vitron

-Chemical-resistant footwear plus socks -Protective eyewear

-Chemical-resistant headgear for over-

head exposures -Chemical-resistant apron when cleaning

-Chemical-resistant apron when cleaning equipment, mixing or loading

-Respirator with either an organic vaporremoving cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number TC-14G).

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of the gloves before removing.

ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to aquatic invertebrates and wildlife. Birds in treated areas may be killed. Shrimp and other aquatic organisms may be killed at recommended application rates. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame. Not for use or storage in or around the home.



PESTICIDE EMERGENCY INFORMATION

For any type of an emergency involving a pesticide, immediately contact the following emergency information centers for assistance.

Current as of February 2000



Human Pesticide Poisoning

MICHIGAN POISON CONTROL SYSTEM

From anywhere in Michigan, call

1 - 8 0 0 - P 0 | S 0 N 1 1 - 8 0 0 - 7 6 4 - 7 6 6 1

Special Pesticide Emergencies

Animal Poisoning	Pesticide Fire	Traffic Accident	Environmental Pollution	Pesticide Disposal Information
Your veterinarian:	Local fire department:	Local police department or sheriff's department:	Pollution Emergency Alerting System (PEAS), Michigan Department of Environmental Quality:	Michigan Department of Environmental Quality. Waste Management Division. Monday – Friday: 8 a.m. – 5 p.m. (517) 373-2730
Phone No.				
or	and	and	and	
Animal Health Diagnostic Laboratory (Toxicology) Michigan State University:Fire Marshal Division, Michigan State Police: M-F: 8-12, 1-5Operations Division, Michigan State Police: (517) 355-0281(517) 355-0281(517) 322-1924*(517) 336-660* Telephone Number Operated 24 Hours		For environmental emergencies: *1-800-292-4706 also National Pesticide Telecommunications Network Provides advice on recognizing		
	* Telephone Number	Operated 24 Hours	*1-800-405-0101 Michigan Department of Agriculture Spill Response	and managing pesticide poisoning, toxicology, general pesticide information and emergency response assistance. Funded by EPA, based at Oregon State University

7 days a week; excluding holidays 6:30 a.m. – 4:30 p.m. Pacific Time Zone

1-800-858-7378 FAX: 1-541-737-0761

Revised by Carolyn J. Randall, Pesticide Education Program, Michigan State University Extension