

Understanding pesticide labels

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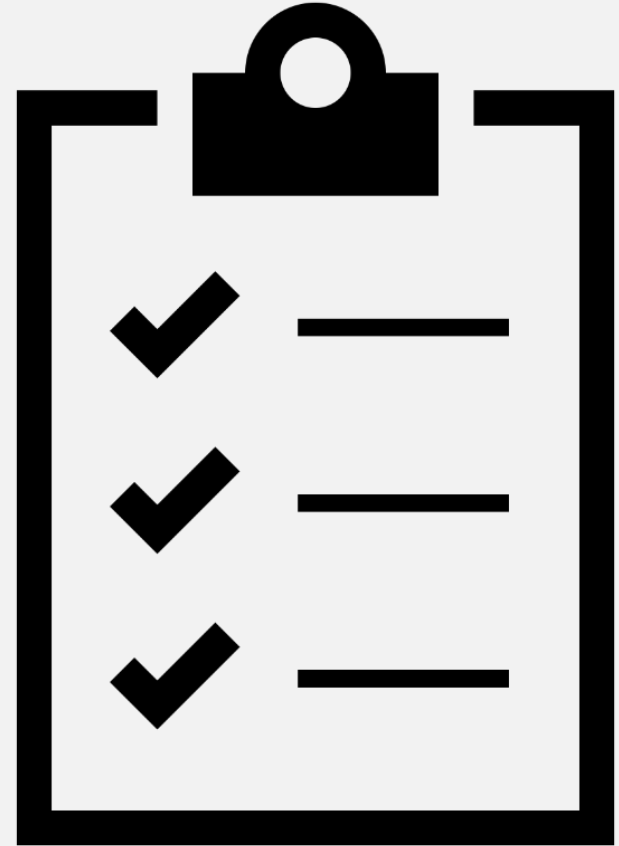
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What we will discuss:

- **Why pesticide labels matter?**
- **Parts of a label**
- **Safety data sheets (SDS)**
- **Understanding directions for use**
- **Basic rate calculations**



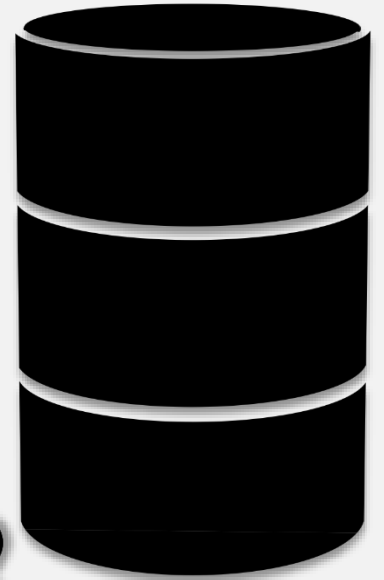
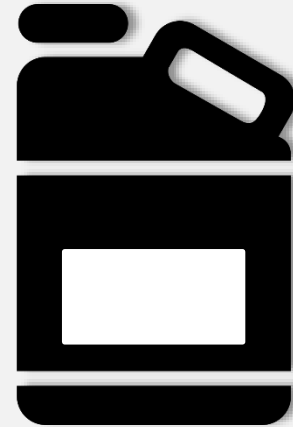
Why pesticide labels matter:

- **What does a pesticide label tell you?**
- **The label is the LAW**
 - “The USER is liable for personal injury, crop or site damage, or pollution that occurs through misuse of a pesticide”¹
 - Civil or criminal
- **What are other reasons to follow the label?**



Parts of a label:

- Name, brand, or trademark product sold under
- Name and address of the producer or registrant
- Net contents
- Registration numbers & establishment number
- Ingredient statement
- Signal Words
- Warning or precautionary statements
- Directions for use
- Use classification



Sample Labels:

1. Restricted use pesticide statement (if applicable)

2. Product name, brand, or trademark

3. Ingredient statement (may appear on back panel if packaging does not provide adequate space on front panel)

4. Child hazard warning statement (if applicable)

5. Signal word (if applicable)

6. First aid statement (may appear on back panel if there is a note indicating this on front panel)

7. Skull and crossbones symbol and the word "Poison" (if applicable)

8. Net contents/net weight

RESTRICTED USE PESTICIDE

Due to (insert reason)

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.

PRODUCT NAME

ACTIVE INGREDIENT(S):.....90.00%

OTHER INGREDIENT(S):.....10.00%

TOTAL:.....100.00%

This product contains ___ lbs of [a.i.] per gallon.

Product information: (what is product used for)
KEEP OUT OF REACH OF CHILDREN

SIGNAL WORD
(ENGLISH\SPANISH)

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

First Aid

If Swallowed
If Inhaled
If on Skin
If in Eyes
Reminder to have label with you when calling emergency phone number or going for treatment. Emergency phone number:
Note to Physician:

SEE OTHER PANEL FOR PRECAUTIONARY STATEMENTS

Poison

Net Contents _____

Restricted Use Designation **1**

Trade Name **2**

Formulation **3**

Mode of Action **4**

Active ingredients **5**

Other ingredients **6**

Net Contents **7**

EPA Reg. No. **8**

Manufacturer **9**

Signal Word **10**

Keep out of Reach of Children **11**

First Aid **12**

13 Precautionary Statements

14 Directions for Use

15 Storage and Disposal

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.

VAPORIZE WP

GROUP **10** INSECTICIDE

ACTIVE INGREDIENT: **Vaporin** By Wt. 12.0%

OTHER INGREDIENTS: 88.0%

NET CONTENTS 5 lb

EPA Reg. No. 123-4567 EPA Est. No. 123

AGRICULTURAL CHEMICAL COMPANY
1234 Industrial Drive
Logan, UT 84321

CAUTION

KEEP OUT OF REACH OF CHILDREN

FIRST AID	
If swallowed:	Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by the poison control center or doctor.
If in eyes:	Hold eye open and rinse with water for 15-20 minutes.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
Harmful if swallowed. Avoid contact with skin and eyes.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
All applicators and other handlers must wear:
• Long-sleeved shirt and long pants.
• Shoes plus socks
• Chemical resistant gloves

USER SAFETY RECOMMENDATIONS
Wash hands before eating, drinking, or chewing gum.
Wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS
This product is toxic to aquatic invertebrates. Do not apply directly to water. Do not apply this product to blooming crops or weeds while bees are actively foraging.

PHYSICAL OR CHEMICAL HAZARDS
Combustible - Do not use or store near heat or open flame.

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

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

STORAGE AND DISPOSAL
Pesticide Storage
Do not store in or around home. Keep out of reach of children. Store in a cool, dry place.

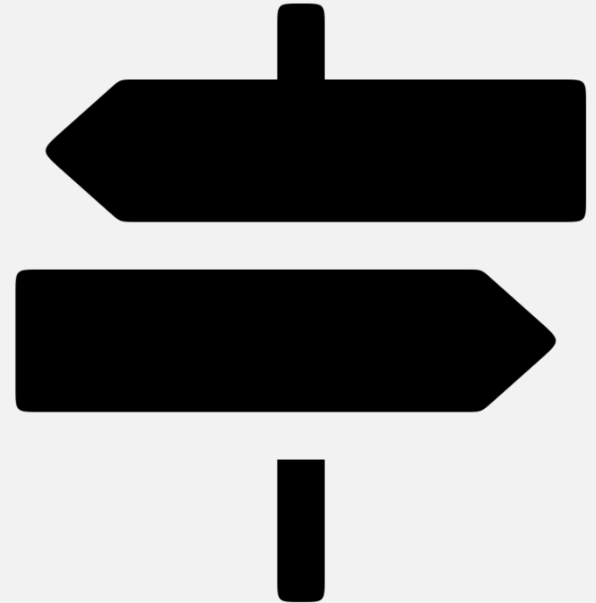
Pesticide Disposal
Do not reuse or refill this container. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

<https://www.epa.gov/pesticide-labels/label-review-training-module-2-parts-label-page-4>

https://intermountainfruit.org/images/ch12-pesticides/pesticide-sample_label.jpg signal

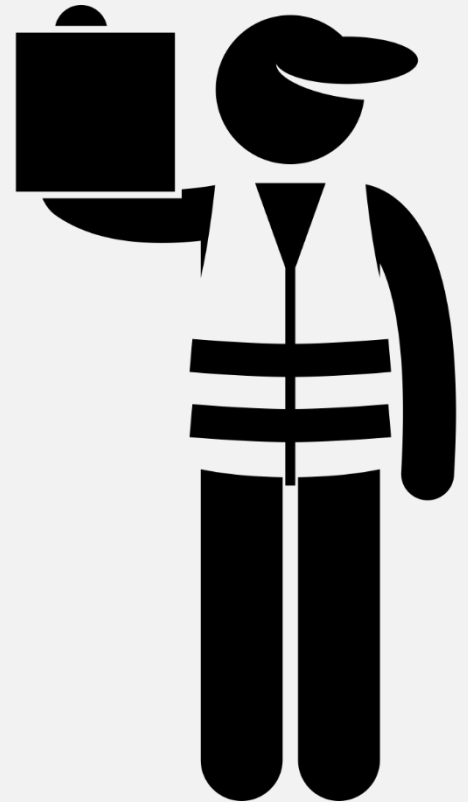
Understanding directions for use:

- **How the product can and can't be used**
 - Pests
 - Sites
 - Rates
 - Restrictions
 - Maximum active ingredient per treatment/year
 - Storage and disposal
 - Any other requirements, as necessary



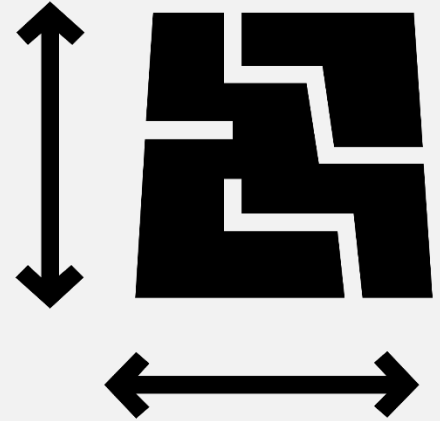
Safety Data Sheets (SDS):

- Formerly Material Safety Data Sheets (MSDS)
- Since 2016, Globally Harmonized System
 - Standard format including 16 sections
- **Detailed information on:**
 - Chemical properties
 - Firefighting measures
 - First aid
 - PPE
 - Spills



Basic rate calculation:

- Why is it important to use the right amount of pesticide?
- What do you need to know?
 - Application rate
 - Treatment area
 - Unit conversions



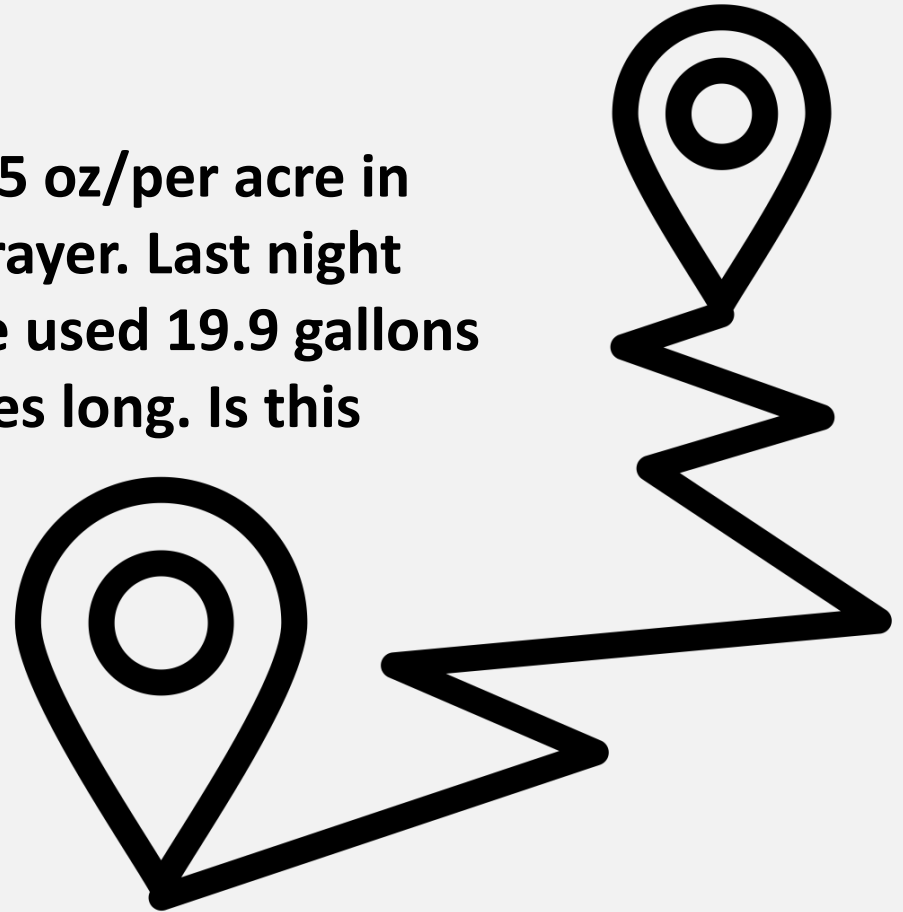
Sample Calculation 1:

- You need to treat a canal that is 15 feet wide and 3 miles long. The label for the larvicide you are using gives an application rate of 3 lbs per acre. How much product will you need for this job?



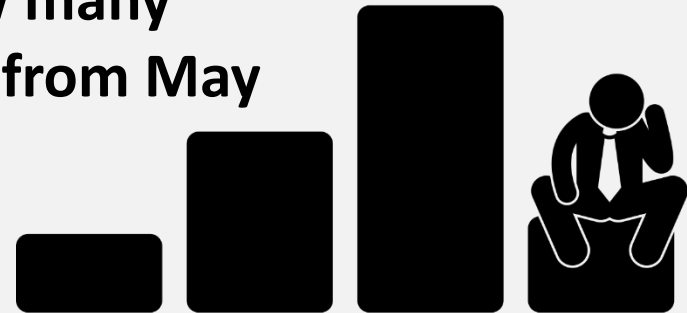
Sample Calculation 2:

- You are using the label rate of 1.5 oz/per acre in your ULV (Ultra Low Volume) sprayer. Last night your technician recorded that he used 19.9 gallons of product. His route was 33 miles long. Is this accurate?



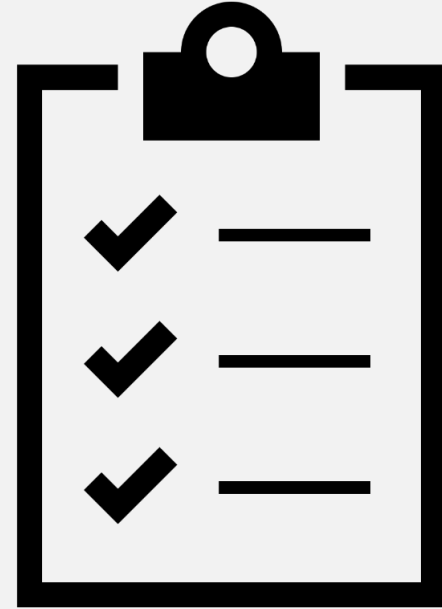
Sample Calculation 3:

- You are in charge of ordering larvicide for the season. You have about 90 acres of standing water in your jurisdiction. You decide to buy a product that will last about 30 days per application. The application rate on the label 6 lbs/acre. They come in 50 lbs bags and cost \$200 per bag. How many bags will you need for a season that runs from May 1 to October 31? How much will it cost?



What we discussed:

- **Why pesticide labels matter?**
- **Parts of a label**
- **Understanding Directions for Use**
- **Basic Rate Calculations**



Additional resources:

- **Pesticide Label Review Training**
 - <https://www.epa.gov/pesticide-labels/pesticide-label-review-training>
- **EPA Pesticide Label Information**
 - <https://www.epa.gov/pesticide-labels>
- **National Pesticide Applicator Certification Core Manual**
 - <http://www.scmac.org/PDF/CoreManual2.pdf>

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Feel free to contact me with any questions at:

ARuiz3@cdc.gov

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