Labels and Pesticide Formulations

Tim Stock
Oregon State University
Integrated Plant Protection Center
"DDT is good for me-e-e-e!"
RESTRICTED USE PESTICIDE

Due to Acute Toxicity
Applicator's certification.

ZENECAG-products

A Weed, Grass, and Harvest Aid Desiccant/Defoliant Herbicide

ACTIVE INGREDIENT
Paraquat dichloride (1,1-dimethyl-4,4'-bipyridinium dichloride) 43.00%

INERT INGREDIENTS
56.00%

Total 100.00%

Contains 2.0 lbs paraquat per gallon or 4.14 lbs paraquat acid per gallon.
Contains acetone (69%) and amine.
EPA Reg. No. 10182-372

KEEP OUT OF REACH OF CHILDREN
DANGER POISON

Peligro
Si usted no entiende esta etiqueta, hable con alguien para que se la explique a usted en detalle. (If you do not understand the label, ask someone to explain it to you in detail.)

NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS.
NEVER SWALLOWED TAKE IMMEDIATE ACTION AS PRESCRIBED IN STATEMENT OF PRACTICAL TREATMENT. SYMPTOMS ARE PROLONGED AND PAINFUL.
DO NOT USE OR STORE IN OR AROUND THE HOME.
DO NOT REMOVE CONTENTS EXCEPT FOR IMMEDIATE USE.

SEE INSIDE FOR STATEMENT OF PRACTICAL TREATMENT AND COMPLETE DIRECTIONS FOR USE.
What do these acronyms stand for?

- EPA: Environmental Protection Agency
- NIOSH: National Institute for Occupational Safety and Health
- REI: Restricted Entry Interval
- PPE: Personal Protective Equipment
- PHI: Pre-Harvest Interval
- AI: Active Ingredient
- LD50: Lethal Dose 50
Questions:

• Can you apply a greater amount of pesticide per acre than is on the label?
  No you cannot

• Can you use the pesticide on a PEST that is not on the label?
  Yes you can

• Can you use the pesticide on a CROP that is not on the label?
  No you cannot

• When do you look at the label?
  1st, when you buy it
  2nd, before you use it
  3rd, before you dispose of it
DO NOT FORGET:

“The Label is the Law”
Signal Word Exercise

Draw a line from the signal word to the statement that best describes the level of toxicity or hazard.

**Signal Words**

- WARNING-AVISO
- CAUTION-PRECAUCION
- DANGER-PELIGRO
- DANGER PELIGRO POISON VENENO

**Level of Toxicity or Hazard**

- Extremely Toxic/Hazardous
- Extremely Hazardous (to eyes/skin)
- Moderately Toxic/Hazardous
- Least Toxic/Hazardous
Pesticide Label Exercise

- What is signal word?
- What is REI?
  Note: Caution labels - minimum 4 hours, unless label states longer
  Warning labels - minimum 24 hours, unless label states longer
- What is active ingredient, and how much is there?
  Note: Dry formulations are a % of weight.
  Liquids are lbs. per gallon
- What are Brand, Common, and Chemical names?
- What kind of formulation is it?
- What are FIRST AID and Environmental Hazards?
- What PPE do you need to wear?
- What is the EPA Registration Number?
Pesticide Label Exercise (continued)

- Is this pesticide restricted or general use?
- Can an employee without a license apply this?
- What routes of entry are mentioned under “Precautionary Statements”?
- How are you required to notify people that they cannot enter the treated area during the Restricted Entry Interval?

Note: If not clearly stated in the “AGRICULTURAL USE REQUIREMENTS” box, you have the option of oral notification or posting signs (see “How to Comply” manual)
Pesticide Label Exercise

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- What is REI?
  Note: Caution labels - minimum 4 hours, unless label states longer
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- What kind of formulation is it?

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Restricted Use Pesticides

All pesticides are either “general use” or “restricted use”

Restricted Use Pesticide:

• “Any pesticide that poses special risks, even when used according to the label”

• “Restricted Use” statement is plainly visible on front of label

• Must be a licensed applicator, or under supervision of a licensed applicator to apply a restricted use pesticide
Capture
2EC

Insecticide/Miticide

EPA Reg. No. 279-3069
EPA Est. 279-

Active Ingredient: Bifenthrin: (2 methyl[1,1'-biphenyl]-3-yl)
methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-
2,2-dimethyl-cyclopropanecarboxylate* ............25.1%

Inert Ingredients:** ........................................74.9%

* cis isomers 97% minimum, trans isomers 3% maximum.
** Contains xylene range aromatic solvents.

This product contains 2 pounds active ingredient per gallon.
U.S. Patent No. 4,238,505

HOTLINE NUMBER

Have the product container or label with you when calling your pest control center or doctor, or going for treatment. You may also call 800-331-3148 for emergency medical treatment information.

Note to Physician:
This product is a pyrethroid. If large amounts have been swallowed, stomach and intestines should be evacuated. Treatment should be symptomatic and supportive. Digestible fats, oils, or alcohol may aid absorption and should be avoided.

For Emergency Assistance Call (800) 331-3148.

PRECAUTIONARY STATEMENTS

Warning
May be fatal if swallowed. Harmful if inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapor. Avoid contact with skin, eyes, or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing before reuse.

Personal Protective Equipment:
Some materials that are chemical-resistant to this product are provided below. If you want more options, follow the instructions on an EPA chemical resistance category selection chart.

Handlers who may be exposed to the dilute through other tasks must wear: long-sleeved shirt and long
RESTRICTED USE PESTICIDE
Due to Acute Toxicity
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.

Guthion® Solupak 50%
Wettable Powder Crop Insecticide
IN WATER SOLUBLE PACKETS
For effective economical insect control.

ACTIVE INGREDIENT:
O,O-Dimethyl S-[(4-oxo-1,2,3-benzotriazin-3(4H)-yl)methyl]phosphorodithioate ................................................................. 50%

INERT INGREDIENTS: .................................................................................................................................................. 50%
.................................................................................................................................................. 100%

EPA Reg. No. 264-733
EPA Est. No. 3125-MO-1

DEALERS SHOULD SELL IN ORIGINAL PACKETS ONLY
Keep water soluble packets in this container and store in a cool dry place, but not below freezing (32F). Protect from heat. Keep away from open flame. Do not heat. Entire inner packets dissolve in water. After opening outer bag, drop the required unopened inner packets into spray tank as directed. Do not excessively handle water soluble packet or expose it to moisture, since this may cause breakage.
Special Local Needs Pesticides

- Section 24c of FIFRA allows states to give Special Local Needs registration
- Lasts until amended or cancelled
- A Special Local Needs label is given to you when you buy the product
- For current 24c labels, see http://www.pnn.wsu.edu/pnnor.html#Section24cs
Special Local Need Registration
SUPPLEMENTAL LABELING FOR DISTRIBUTION AND USE ONLY IN OREGON

Sencor® DF
75% Dry Flowable Herbicide
EPA Reg. No. 3125-325

For Weed Control in Established¹ Perennial Grasses Grown for Seed in Oregon West of the Cascade Mountains and in Crook, Deschutes, and Wasco Counties

Used as directed below, SENCOR 75 DF will reduce competition from volunteer seedlings of the indicated crop, annual E species, annual ryegrass, and annual bluegrass. SENCOR will control, rattail fescue, henbit, ivyleaf speedwell, chic mustards, and shepherdspurse. Control of the volunteer crop and grassy weeds may be enhanced by adding wetting containing crop oil. Follow the directions for use and rates recommended on the wetting agent label.

DIRECTIONS FOR USE

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

Do not apply this product through any type of irrigation system.

<table>
<thead>
<tr>
<th>CROP</th>
<th>RATE SENCOR 75 DF</th>
<th>REMARKS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>POUNDS/ACRE</td>
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</table>
FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF OREGON

PLATINUM®

EPA Reg. No. 100-939
EPA SLN No. OR-060015

APPLICATION THROUGH IRRIGATION SYSTEMS FOR INSECT CONTROL IN POTATOES

This label valid until December 31, 2010 or until otherwise amended, withdrawn, cancelled, or suspended.

Active Ingredient:
Thiamethoxam¹ .......................................................... 21.6%

Other Ingredients: .......................... 78.4%

Total: .......................... 100.0%

¹CAS No. 153719-23-4

Platinum is a soluble concentrate containing 2 pounds of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.
Section 18

- Used for special emergency situations
- Emergency exemption permitted under Section 18 of FIFRA
- Valid for less than one year
- Additional label that comes with regular label
- For current Section 18s, see:
4F Herbicide
For Agricultural or Commercial Use Only
Oregon Product ID No: 2006OR004

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING

THESE USE DIRECTIONS MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

The US Environmental Protection Agency has granted an emergency exemption under the provisions of Section 18 of the Federal Insecticide, Fungicide and Rodenticide Act as amended, to the Oregon Department of Agriculture for the use of sulfentrazone (Spartan 4F) to control broadleaf weeds in strawberries grown in Benton, Clackamas, Columbia, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill counties. This exemption is effective from March 15, 2006 through February 28, 2007.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Weeds Controlled</th>
<th>Rate of Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberry</td>
<td>Common groundsel</td>
<td>4 to 8 ounces per acre</td>
</tr>
<tr>
<td></td>
<td>Common lambsquarters</td>
<td>0.125 to 0.25 lb ai per acre</td>
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<tr>
<td></td>
<td>Corn spurry</td>
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<tr>
<td></td>
<td>Ladysthumb</td>
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<tr>
<td></td>
<td>Mayweed</td>
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<tr>
<td></td>
<td>Redroot pigweed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pineapple weed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prostrate knotweed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wild buckwheat</td>
<td></td>
</tr>
</tbody>
</table>
FOR DISTRIBUTION AND USE ON CRANBERRY IN OREGON
(CLATSOP, COOS, AND CURRY COUNTIES ONLY)

CALLISTO® Herbicide
Oregon Product ID No. 2006OR016
Effective Dates: April 21, 2006 to October 15, 2006

An Herbicide for the Control of Specific Susceptible Annual and Perennial Weeds when
Applied Pre- and/or Post-Emergence on Cranberry

DIRECTIONS FOR USE

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

All applicable directions, restrictions and precautions on the registered product label for Callisto (EPA Registration No. 100-1131) must be followed.

These directions for use must be in the possession of the user at the time of application.

Failure to follow the use directions and precautions on this label may result in plant injury or poor weed control.

Specific Crop Use Directions
What kind of Supervision?

• **Unlicensed applicators who are supervised by Licensed Applicators:**
  Detailed guidance for applying properly, provisions for contacting supervisor if needed (from 40 CFR Part 171.6). Follow the label.

• **Commercial & Public Pesticide Trainees who are *Directly Supervised***:
  Must be available by radio, telephone, or in person.

• **Commercial & Public Pesticide Trainees who are *Immediately Supervised***:
  Must be on-site at all times and be no further than five minutes from the trainee.
Get Labels and MSDS Sheets Off the Web

www.greenbook.net

www.cdms.net
The FOOTPRINT Pesticide Properties Database

http://eu-footprint.org/pppdb.html

(Click “FOOTPRINT PPBD” at bottom of page)
Tim Stock
Integrated Plant Protection Center
Oregon State University
stockt@science.oregonstate.edu
(541) 737-6279
Google this: Oregon pesticide safety

INTEGRATED PLANT PROTECTION CENTER
SEASON'S GREETINGS FROM IPPC!

OSU Extension Agriculture

Pesticide Safety and IPM Education Program

Program Areas

Pesticide Education
The Program organizes and provides training expertise in numerous pesticide safety events in English and Spanish. It provides technical and methodological support to county extension agents, personnel from community colleges, commodity commissions, and others who conduct pesticide safety education events.

Farm Safety
The Program promotes farm safety within the agricultural community via "Farm Safety Tips" and providing information on its website. In the future, the Program will provide certification to OSU Extension faculty who want to conduct youth tractor safety training.

IPM in Schools
The Program will develop an outreach and training program to promote the implementation of IPM in schools. It will also develop educational IPM programs for students in schools.

*Everybody knows something. Nobody knows everything. Although the individual may know little, the group as a whole knows a lot.*