

# UC Ag Experts Talk about Label Reading

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<http://ucanr.edu/TrainMe>



**University of California**  
Agriculture and Natural Resources



## Reading Pesticide Labels for Making Safe Applications

- What is a pesticide label
- What important information you can expect to find on labels and where
- What is the difference between a label and a Safety Data Sheet (SDS)
- Where you are required to keep the labels
- What are some ways we are different in California
- Resources for you



## What is a Pesticide Label

- Complex legal document
- Detailed safety instructions
- Detailed use instructions





# What is a Pesticide Label





## When to Read the Label

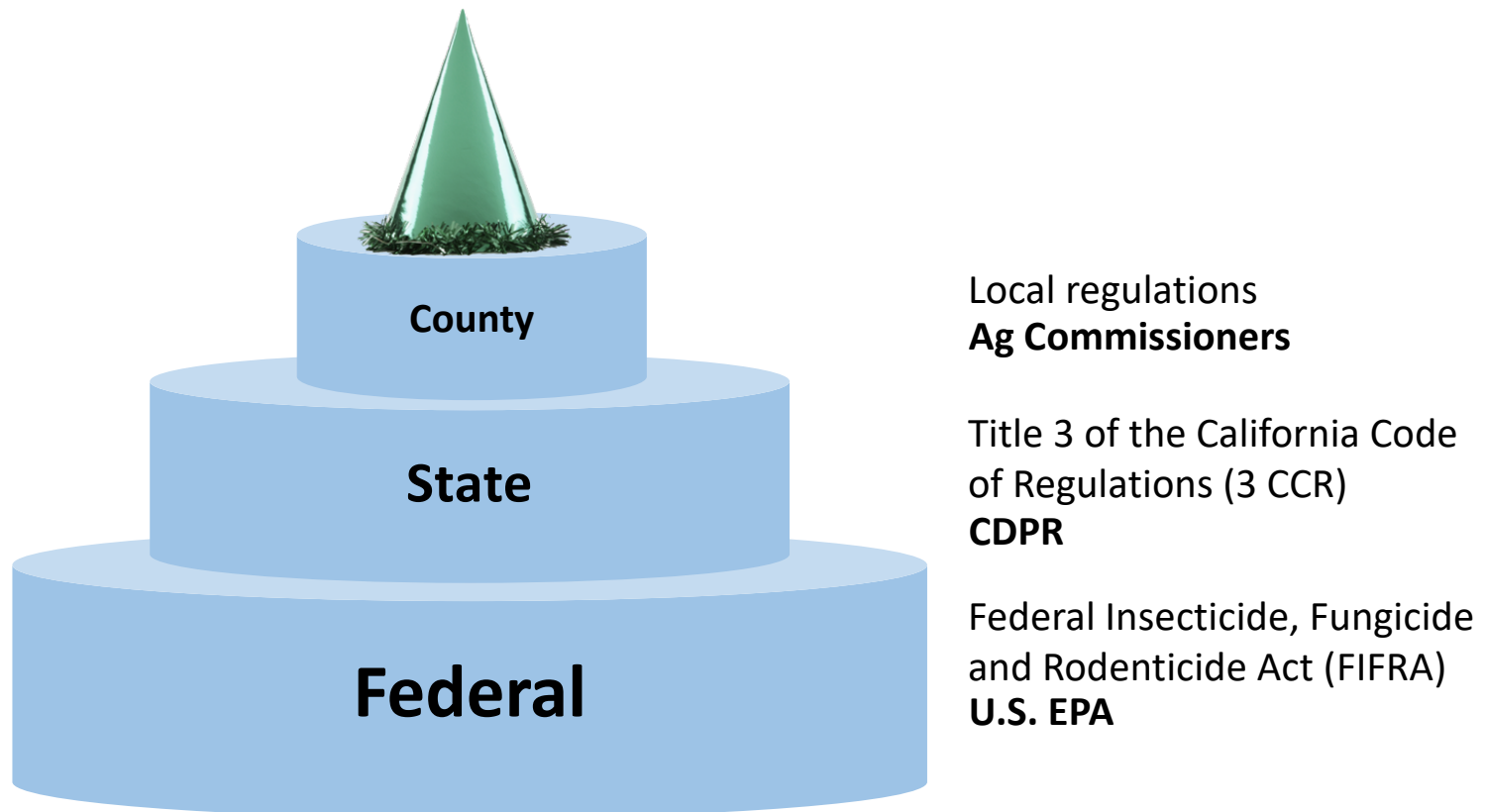
- Before buying
- Before mixing
- Before loading
- Before applying
- When storing
- When transporting
- Before transporting





## The Label is the Law

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





## What Pesticide Labels Contain

- What information do you usually find on pesticide labels?
- What information is required to be on pesticide labels?



# What Pesticide Labels Contain - Front Page

- **Restricted Use Pesticide Statement.** Pesticides are classified as either general-use or restricted-use. Pesticides without this statement are general-use, except where special state restrictions apply.

**UC IPM | University of California**  
Agriculture and Natural Resources | Integrated Pest Management Program

**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.

**Group 22 Herbicide**

**Knock'em down 3SL**  
Herbicide By Toxik™  
A weed, grass, and harvest aid desiccant/detoliant herbicide.

**Active Ingredients:**  
Paraquat dichloride ..... 43.2%  
(tetrachlorosophthalonitrile) ..... 56.8%  
**Total:** ..... 100.00%

**Water Soluble Liquid**  
Contains 3.0 pounds paraquat cation per gallon as 4.14 pounds of dichloride salt per gallon. Contains emetic and stench (odor), and dye.

**EPA Reg. No. 000-000 EPA Est. 000-XX-000**  
SCP 1364A-L1 0411 343162  
Net Contents 2.5 gallons

**©2016 Toxik, LLC, YourTown, YourState, 01234**

**KEEP OUT OF REACH OF CHILDREN. DANGER/PELIGRO POISON/VELENO**

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

**FIRST AID**  
Contains Paraquat, a Bipirydylum Herbicide

**If swallowed:**

- Call a poison control center or doctor IMMEDIATELY for treatment advice.
- SPEED IS ESSENTIAL. Immediate medical attention is required if available. Give an absorbent such as activated charcoal, bentonite, or Fuller's Earth.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**If inhaled:**

- Move person to fresh air.
- The odor of this product is from the stanching agent, which has been added, not from the paraquat.
- If person is not breathing, call 911 or an ambulance.
- Call a poison control center or doctor for further treatment advice.

**If in eyes:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**If on skin or clothing:**

- Take off contaminated clothing.
- IMMEDIATELY wash with soap and water and rinse for 15-20 minutes. Prolonged contact will cause severe irritation. Contact with irritated skin or a cut or repeated contact with intact skin may result in poisoning.
- GET MEDICAL ATTENTION. Call a poison control center or doctor for treatment advice.

**NOTE TO PHYSICIAN:**  
Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an absorbent has not shown any clinical benefit. Do not use supplemental oxygen. Eye splashes from concentrated material should be treated by an eye specialist after initial treatment. With the possibility of late onset corneal ulceration, it is advised that patients with paraquat eye injuries be examined by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat; however, contact with irritated or cut skin or repeated contact with intact skin may result in poisoning.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOT LINE NUMBER:** For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-000-0000

**PRECAUTIONARY STATEMENTS**  
Hazards to Humans and Domestic Animals

**DANGER/PELIGRO POISON/VELENO**

May be fatal if swallowed. Fatal if inhaled. Corrosive. Causes irreversible eye damage. Wear protective eyewear. Do not breathe spray mist. Wear a dust/mist respirator. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**IMPORTANT:** Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

**Personal Protective Equipment (PPE) Applicators and other handlers (other than Mixers and Loaders) must wear:**

- Long-sleeve shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical-resistant gloves - Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or Viton®)
- A dust/mist NIOSH approved respirator with any N, R, F or HE filter. The respirator should have a NIOSH approval number prefix TC-94A.

**Mixers and Loaders must wear:**

- Long-sleeve shirt and long pants
- Shoes plus socks
- A dust/mist NIOSH approved respirator with any N, R, F or HE filter. The respirator should have a NIOSH approval number prefix TC-94A.
- Chemical-resistant gloves - Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or Viton®)
- Chemical-resistant apron
- Face shield

**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.

**RESTRICTED USE PESTICIDE**  
(GROUND AND SURFACE WATER CONCERNS)  
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.  
THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

**For Ground Application Only**

**syngenta.**

A Preemergence Herbicide for Control of Annual Grass and Broadleaf Weeds in Field Corn, Field Production Seed Corn, Field Stage Corn, Sweet Corn, Yellow Popcorn, and Grain Sorghum

**Active Ingredients:**  
S-metolachlor (CAS No. 87392-12-9) ..... 27.15%  
Atrazine (CAS No. 1912-24-9) ..... 6.84%  
Atrazine Related Compound ..... 0.21%  
Meclozox (CAS No. 194209-62-8) ..... 2.11%  
Other Ingredients ..... 63.04%  
**Total:** ..... 100.00%

Net Contents per gallon: S-metolachlor 2.49 pounds, Meclozox 0.249 pounds, and Atrazine 0.935 pounds.

**KEEP OUT OF REACH OF CHILDREN. CAUTION**

See additional precautionary statements and directions for use inside booklet.

**Callisto Plant Technology**  
EPA Reg. No. 100-1442 EPA Est. 100-LA-001  
SCP 1442A-L1B 0414  
4046618

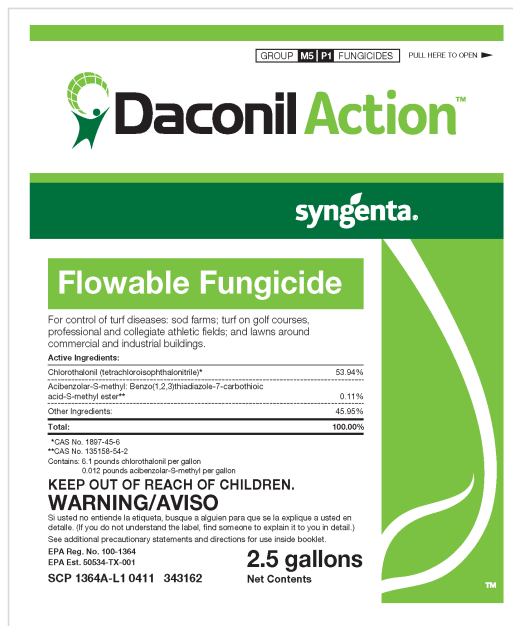
**2.5 gallons**  
Net Contents





## What Pesticide Labels Contain - Front Page

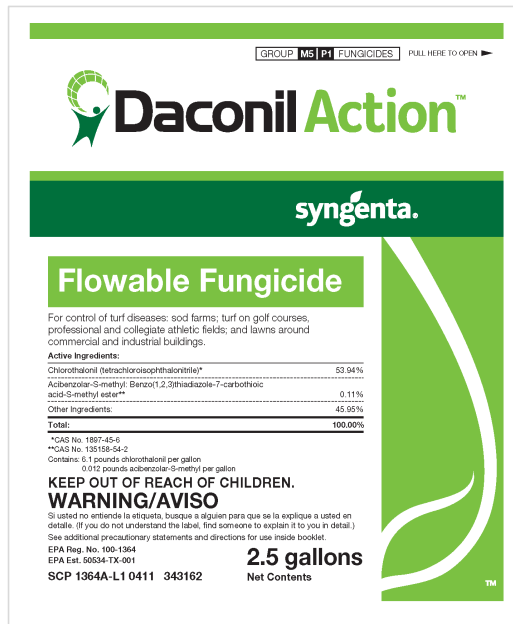
- **Brand Name.** A brand name is the name the manufacturer gives to the product and is used for all advertising.





# What Pesticide Labels Contain - Front Page

- **Ingredients.** Pesticide labels list the percentage of active and other ingredients by weight.



**Active Ingredients:**

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Chlorothalonil (tetrachloroisophthalonitrile)\*

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# What Pesticide Labels Contain - Front Page

- **Keep Out of Reach of Children and Signal Word.** Pesticide labels list the percentage of active and other ingredients by weight.

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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.


Group **22** Herbicide

**Knock'em down 35L**  
Herbicide by Toxik™  
A weed, grass, and harvest aid desiccant/detoliant herbicide.

**Active Ingredients:**  
Paraquat dichloride .....43.2%  
Other Ingredients: .....56.8%  
Total: .....100.00%

**Water Soluble Liquid**  
Contains 3.0 pounds paraquat cation per gallon as 4.14 pounds of dichloride salt per gallon. Contains emetic and stench (odor), and dye.

**EPA Reg. No. 000-000 EPA Est. 000-XX-000**  
SCF 1364A-L1 0411 343162  
Net Contents 2.5 gallons

**KEEP OUT OF REACH OF CHILDREN. DANGER/PELIGRO POISON/VENENO** 

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.)

©2016 Toxik, LLC, YourTown, YourState, 01234

**FIRST AID**  
Contains Paraquat, a Bipirydylum Herbicide

**If swallowed:**

- Call a poison control center or doctor IMMEDIATELY for treatment advice.
- SPEED IS ESSENTIAL. Immediate medical attention is required. If available, give an absorbent such as activated charcoal, bentonite, or Fuller's Earth.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**If inhaled:**

- Move person to fresh air.
- The odor of this product is from the stanching agent, which has been added, not from the paraquat.
- If person is not breathing, call 911 or an ambulance.
- Call a poison control center or doctor for further treatment advice.

**If in eyes:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**If on skin or clothing:**

- Take off contaminated clothing.
- IMMEDIATELY wash with soap and water and rinse for 15-20 minutes. Prolonged contact will cause severe irritation. Contact with irritated skin or a cut or repeated contact with intact skin may result in poisoning.
- GET MEDICAL ATTENTION. Call a poison control center or doctor for treatment advice.

**NOTE TO PHYSICIAN:**  
Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an absorbent has not shown any clinical benefit. Do not use supplemental oxygen. Eye splashes from concentrated material should be treated by an eye specialist after initial treatment. With the possibility of late onset corneal ulceration, it is advised that patients with paraquat eye injuries be examined by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat; however, contact with irritated or cut skin or repeated contact with intact skin may result in poisoning.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOT LINE NUMBER:** For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-000-0000

**PRECAUTIONARY STATEMENTS**  
Hazards to Humans and Domestic Animals

**DANGER/PELIGRO POISON/VENENO**

May be fatal if swallowed. Fatal if inhaled. Corrosive. Causes irreversible eye damage. Wear protective eyewear. Do not breathe spray mist. Wear a dust/mist respirator. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**IMPORTANT:** Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

**Personal Protective Equipment (PPE) Applicators and other handlers (other than Mixers and Loaders) must wear:**

- Long-sleeve shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical-resistant gloves - Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or Viton®)
- A dust/mist NIOSH approved respirator with any N, R, P, or HE filter. The respirator should have a NIOSH approval number prefix TC-84A.

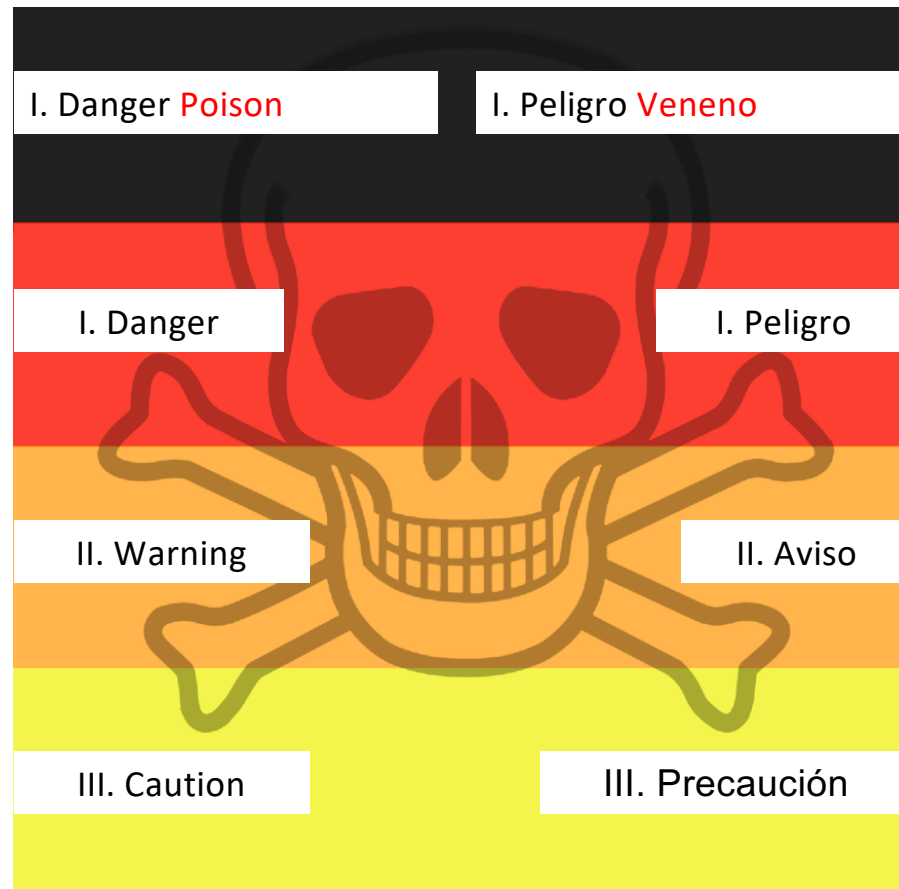
**Mixers and Loaders must wear:**

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- Chemical-resistant apron
- Face shield

**KEEP OUT OF REACH OF CHILDREN. DANGER/PELIGRO POISON/VENENO** 



# Signal Words





# What Pesticide Labels Contain - Front Page

- **First Aid.** This statement provides emergency information and tells when to seek medical attention.

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Agriculture and Natural Resources | Integrated Pest Management Program

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Group **22** Herbicide

**KEEP OUT OF REACH OF CHILDREN. DANGER/PELIGRO POISON/VELENO**

**Knock'em down 3SL Herbicide By Toxik™**  
A weed, grass, and harvest aid desiccant/detoliant herbicide.

**Active Ingredients:**  
Paraquat dichloride (betrachlorofthalonitril).....43.2%  
**Other Ingredients:**.....56.8%  
**Total:**.....100.0%

**Water Soluble Liquid**  
Contains 3.0 pounds paraquat cation per gallon as 4.14 pounds of dichloride salt per gallon. Contains emetic and stomach irritant, and dye.

**EPA Reg. No. 000-000-EPA**  
**Etc. 000-XX-000**  
SCF 1364A-L1 0411 343162  
Net Contents 2.5 gallons

©2016 Toxik, LLC, YourTown, YourState, 01234

**FIRST AID**  
Contains Paraquat, a Bipirydylum Herbicide

**If swallowed:**

- Call a poison control center or doctor IMMEDIATELY for treatment advice.
- SPEED IS ESSENTIAL. Immediate medical attention is required. If available, give an absorbent such as activated charcoal, bentonite, or Fuller's Earth.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**If inhaled:**

- Move person to fresh air.
- The odor of this product is from the stanching agent, which has been added, not from the paraquat.
- If person is not breathing, call 911 or an ambulance.
- Call a poison control center or doctor for further treatment advice.

**If in eyes:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**If on skin or clothing:**

- Take off contaminated clothing.
- IMMEDIATELY wash with soap and water and rinse for 15-20 minutes. Prolonged contact with intact skin may result in poisoning.
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**NOTE TO PHYSICIAN:**  
Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an absorbent has not shown any clinical benefit. Do not use supplemental oxygen. Eye splashes from concentrated material should be treated by an eye specialist after initial treatment. With the possibility of late onset corneal ulceration, it is advised that patients with paraquat eye injuries be examined by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat however contact with irritated or cut skin or repeated contact with intact skin may result in poisoning.

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**PRECAUTIONARY STATEMENTS**  
Hazards to Humans and Domestic Animals

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**IMPORTANT:** Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

**Personal Protective Equipment (PPE) Applicators and other handlers (other than Mixers and Loaders) must wear:**

- Long-sleeve shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical-resistant gloves - Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or Viton®)
- A dust/mist NIOSH approved respirator with any N, R, E, or HE filter. The respirator should have a NIOSH approval number prefix TC-84A.

**Mixers and Loaders must wear:**

- Long-sleeve shirt and long pants
- Shoes plus socks
- A dust/mist NIOSH approved respirator with any N, R, E, or HE filter. The respirator should have a NIOSH approval number prefix TC-84A.
- Chemical-resistant gloves - Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or Viton®)
- Chemical-resistant apron
- Face shield

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- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**If inhaled:**

- Move person to fresh air.
- The odor of this product is from the stanching agent, which is not from the paraquat.
- If person is not breathing, call 911 or an ambulance.
- Call a poison control center or doctor for further treatment advice.

**If in eyes:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

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- IMMEDIATELY wash with soap and water and rinse for 15-20 minutes. Prolonged contact will cause severe irritation. Contact with cut or repeated contact with intact skin may result in poisoning.
- GET MEDICAL ATTENTION. Call a poison control center or doctor for treatment advice.

**NOTE TO PHYSICIAN:**  
Administer either activated charcoal (100g for adults or 2g/kg in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml children). NOTE: The use of gastric lavage without administration has not shown any clinical benefit. Do not use supplemental oxygen from concentrated material should be treated by an eye specialist with paraquat eye injuries be examined by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat however contact with irritated or repeated contact with intact skin may result in poisoning.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOT LINE NUMBER:** For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-000-0000

**FIRST AID**

<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>

**NOTE TO PHYSICIAN**  
Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

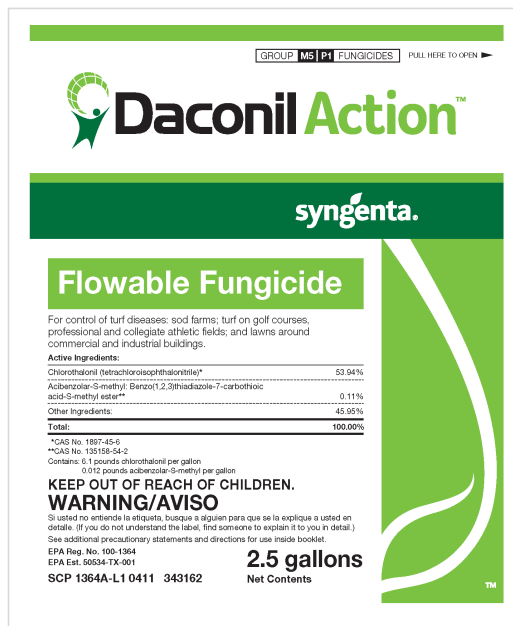
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOT LINE NUMBER**  
For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372



## What Pesticide Labels Contain - Front Page

- **Contents.** Labels list the net contents, by weight or liquid volume, contained in the package.

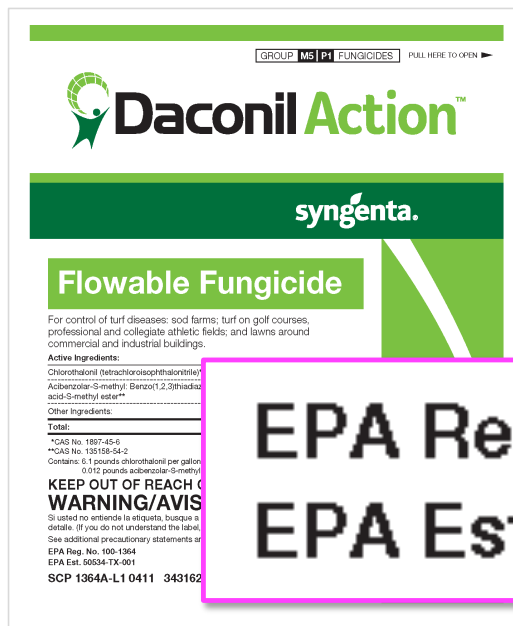


**2.5 gallons**  
Net Contents



## What Pesticide Labels Contain

- **EPA Registration Number.** This is the single most important piece of information for tracking pesticide products and getting treated for pesticide exposure.



**EPA Establishment Number.** This number identifies the site of manufacture or repackaging.

**EPA Reg. No. 100-1364**  
**EPA Est. 50534-TX-001**



## What Pesticide Labels Contain

- **Agricultural Use Requirements.** This is the worker protection part of the labeling, which gives instructions on how to protect fieldworkers and agricultural pesticide handlers.
  - “Do not enter or allow workers to enter treated areas during the restricted entry interval...”
  - PPE required for early entry to treated areas is...”
  - “Notify workers of the application by warning them orally and by posting warning signs at the entrances to treated areas.”

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 about personal protective equipment (PPE) and restricted-entry interval (REI). 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 workers to enter treated areas during the restricted entry interval of 12 hours.

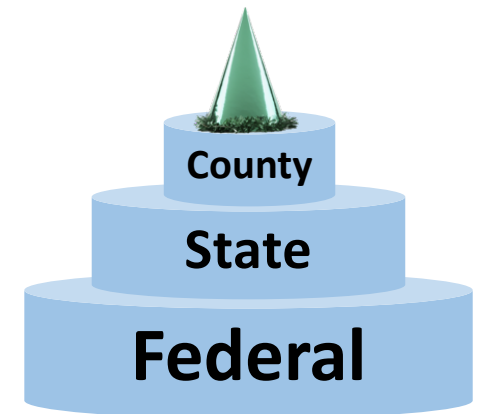
PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material, shoes plus socks, protective eyewear (goggles, face shield, or safety glasses).

*continued...*





# California Specific Field Posting Signs





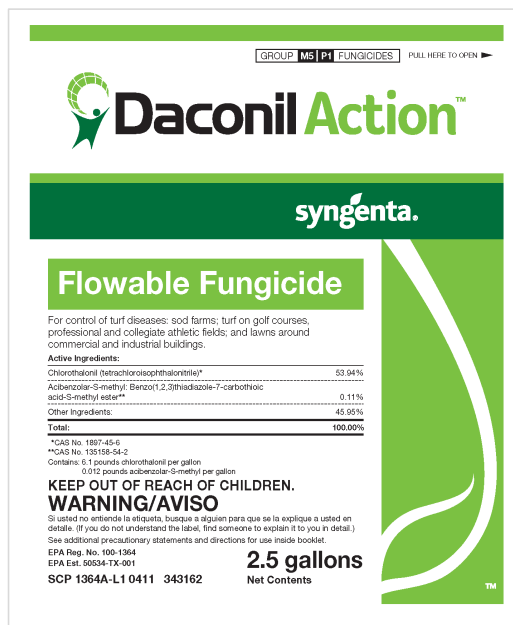
## What Pesticide Labels Contain

- **Precautionary Statements.** Precautionary statements describe pesticide hazards. This section may include up to three areas of hazard.
  1. Hazards to Humans and Domestic Animals
  2. Environmental Hazards
  3. Physical or Chemical Hazards



# What Pesticide Labels Contain

- **Precautionary Statements**
  - Hazards to Humans and Domestic Animals



## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### WARNING/AVISO

May be fatal if inhaled. Do not breathe spray mist. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear appropriate protective eyewear (goggles, face shield, or safety glasses). Harmful if swallowed.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

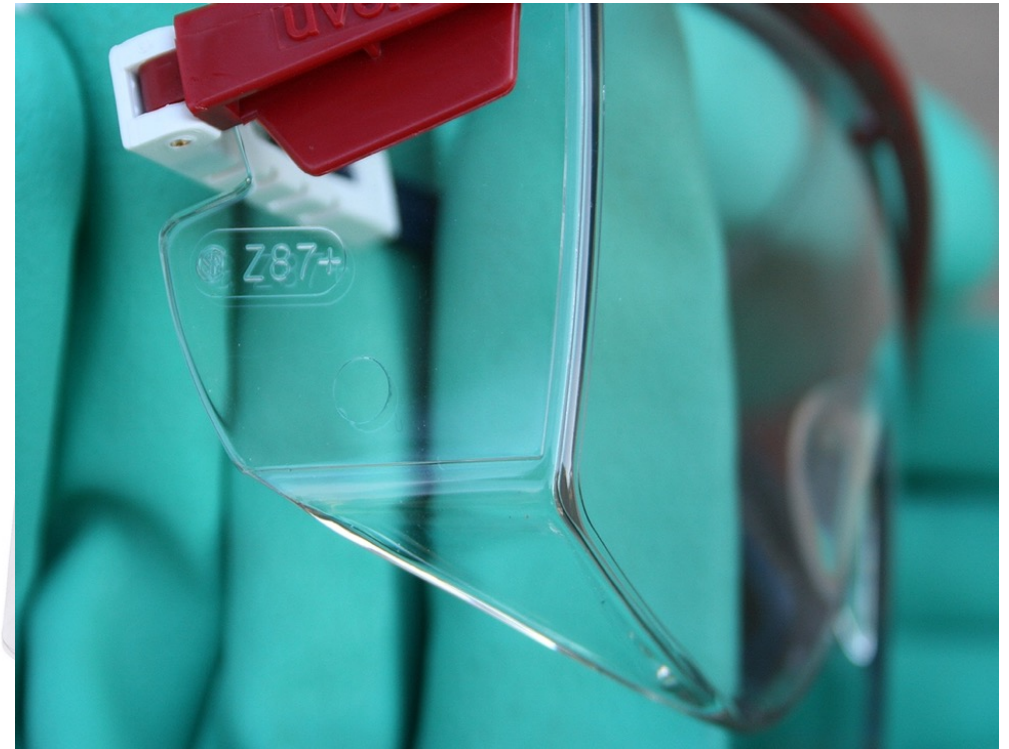
### Mixers, Loaders, and all other Handlers (except Applicators) must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any N, R, P or HE prefilter.
- Protective eyewear (goggles, face shield, or safety glasses)



## 3CCR Section 6738: PPE

- Protective eyewear
  - Z87.1 compliant
  - Front, side, and brow protection



State  
**Federal**



## 3CCR Section 6738: PPE

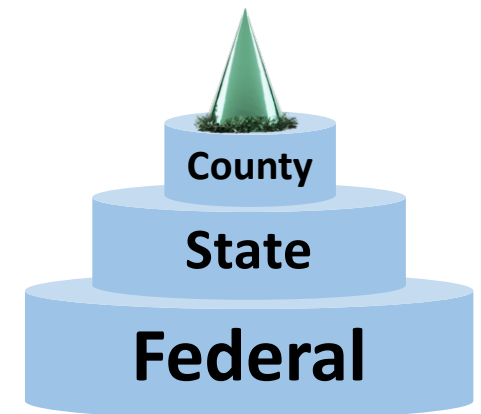
- Chemical resistant gloves



### dpr Glove Category Selection Key

Label Code	Materials Required by Law	Material Code
A	1,2,3,4,5,6,7,8	1: Laminate
B	1,2	2: Butyl
C	1,2,3,4,7,8	3: Nitrile
D	1,2	4: Neoprene
E	1,3,4,8	5: Natural
F	1,2,3,8	6: Polyethylene
G	1,8	7: PVC
H	1,8	8: Viton

All but Laminate and Polyethylene must be 14 mils or thicker





## What Pesticide Labels Contain

- **Precautionary Statements**
  - Environmental Hazards

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply to water, or to areas where surface water is present, or to intertidal areas below the mean high water marks. Drift and runoff may be hazardous to aquatic organisms in neighboring area. Do not contaminate water when disposing of equipment wash water or rinsate.



This pesticide is toxic to fish and aquatic invertebrates. Do not apply to water, or to areas where surface water is present or to intertidal areas below the mean high water marks.



## What Pesticide Labels Contain

- **Precautionary Statements**
  - Physical or Chemical Hazards

**PHYSICAL OR CHEMICAL HAZARDS**

Do not mix BRANDT LIME SULFUR with acids or phosphate fertilizer products. Deadly and potentially extremely flammable hydrogen sulfide gas may be emitted.



Do not mix Brandt Lime Sulfur with acids or phosphate fertilizer products. Deadly and potentially extremely flammable hydrogen sulfide gas may be emitted.



# What Pesticide Labels Contain

- **Directions for Use**

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### DIRECTIONS FOR USE

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.



Do not apply this product in a way that will contact workers or other persons, either directly or through drift

### SPECIFIC CROP DIRECTIONS

#### GRAPES AND SMALL VINE FRUITS (EXCEPT FUZZY KIWIFRUIT)

**Crops of Crop SubGroup 13-07F Including:** Amur river grape, Gooseberry, Grape, Hardy Kiwifruit, Maypop, Schisandra berry, and cultivars, varieties, and/or hybrids of these. Note: Do not apply or allow drift to Concord grapes or crop injury may occur.

Disease Controlled	Product Rate (fl oz/A)	Product Instructions
Powdery Mildew (Ucinula necator)	3.0 - 3.5	Apply on a 14- to 21-day interval as needed.
Botrytis Bunch Rot (Botrytis cinerea)	3.8	Apply on a 14- to 21-day interval as needed.

**Application Restrictions:**

Pre-Harvest Interval (PHI): **14 day(s)**

Minimum interval between applications: **7 days**





# What is the difference Between Pesticide Labels and Safety Data Sheets

## Brandt Lime Sulfur

Fungicide



Not for residential use or application to residential sites. This product may not be used in, on, or around any structure, vehicle, article, surface or area associated with the household, including non-agricultural outbuildings, non-commercial greenhouses, pleasure boats and recreational vehicles; in or around any preschool or day care facility or on humans or pets.

ACTIVE INGREDIENT:	29.0%
OTHER INGREDIENTS:	71.0%
TOTAL:	100.0%

Density: Baume at 60°F ..... 31\*  
Lbs Per Gallon at 60°F ..... 10.6  
Contains Calcium and Sulfur expressed as Gypsum—3.0 lbs. per gallon. Other combined Sulfur 1.9 lbs. per gallon.  
EPA Reg. No. 61842-30-48813 EPA Est. No. 48498-CA-1

### KEEP OUT OF REACH OF CHILDREN DANGER — PELIGRO

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:** Call a Poison Control Center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the Poison Control Center or doctor. Do not give anything by mouth to an unconscious person.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a Poison Control Center or doctor for further treatment advice.

**IF IN EYES:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Poison Control Center or doctor for treatment advice.

**HOT LINE NUMBER:** Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. You may also contact 1-866-374-1975 for emergency medical treatment information.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate gastric lavage.

#### PRECAUTIONARY STATEMENTS

##### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Fatal if swallowed. Fatal if absorbed through the skin. Fatal if inhaled. Corrosive. Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. This product is corrosive to flesh because of its caustic alkaline nature.

##### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

#### Mixers, loaders, applicators and other handlers must wear:

Coveralls over long-sleeved shirt and long pants.

Chemical-resistant gloves.

Chemical-resistant footwear plus socks.

Goggles or face shield.

Chemical-resistant headgear for overhead exposure.

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

A NIOSH approved respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter.

For exposures in enclosed areas a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) must be used.

For exposures outdoors, a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) must be used.

Discard clothing and other absorbent material that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

If farm workers are unable to read, they must be given oral warnings and it must be assured that they understand label precautions and first-aid treatments.

Warnings must be given in appropriate language if workers do not understand English. Oral warnings should be given to inform workers of areas or fields which should not be entered without protective clothing, the amount of time the area or field should be vacated and first-aid actions to take in case of accidental exposure.

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 gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Drift may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not mix BRANDT LIME SULFUR with acids or phosphate fertilizer products. Deadly and potentially extremely flammable hydrogen sulfide gas may be emitted.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## Safety Data Sheet Lime Sulfur Solution

SDS Number: Revision: 11/18/2013

### Section 1: Identification

<b>1a. Product Name:</b>	Brandt Lime Sulfur, EPA Reg. No. 61842-30-48813		
<b>1b. Other Identification:</b>	Chemical Family	Inorganic salt solution	
	Formula	CaS <sub>2</sub>	
	EC Pre-Registration #:	05-2118202566-47-0000	
<b>1c. Recommended Use of Chemical:</b>	Agricultural Industry, Pesticide - Fungicide		
<b>1d. Manufacturer:</b>	Brandt Consolidated, Inc. 2935 South Koke Mill Road Springfield, IL 62711 (217) 547-5800		
	Information		
<b>1e. Emergency Contact:</b>	Brandt Consolidated, Inc.	(559) 994-9144	
	CHEMTREC	(800) 424-9300 (Domestic)	(703) 527-3887 (International)

### Section 2: Hazard(s) Identification

<b>2a. Hazard Classification:</b>	Health	Acute Oral toxicity	Category 4
		Acute Dermal toxicity	Category 4
		Acute Inhalation toxicity	Category 4
		Skin corrosion/irritation	Category 2
		Eye damage/irritation	Category 2B
	Physical	None	
<b>2b. Signal Word:</b>	Warning		
<b>Hazard Statement(s):</b>	Harmful if swallowed Harmful in contact with skin Harmful if inhaled Causes skin irritation Causes eye irritation		



Symbol(s):

**Precautionary Statement(s):** Wash thoroughly with soap and water after handling.  
If swallowed, get medical attention/contact Poison Control Center immediately.  
Wear protective gloves/protective clothing when handling product.  
If contact with the skin: Was immediately with water for 15 minutes.



## Where are you Required to Keep Labels

- Section 6602 Availability of Labeling

A copy of the registered labeling that allows the manner in which the pesticide is being used shall be available ***at each use site***.





# Where Are You Required to Keep Pesticide Labels



## Safety Rules for Pesticide Handlers in Agricultural Settings

The pesticide label, your training, and the Pesticide Safety Information Series (PSIS) leaflets tell you about pesticide dangers at work. To handle pesticides in agriculture (on farms, forests, nurseries or greenhouses) you must be at least 18 years old.

Your employer must teach you how to use pesticides safely and how to protect yourself when you use them. Pesticides are chemicals that are used to control pests: unwanted insects, predatory animals, rodents, weeds, and plant diseases. Spray adjuvants are also pesticides under California law.



### EMERGENCY MEDICAL CARE

Your employer must make plans for emergency medical care before you start working with pesticides. If you think that pesticides made you sick or hurt you at work, immediately tell your employer. They must make sure that you are taken to a doctor right away. **DO NOT TAKE YOURSELF.**

Emergency medical care is available at:

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

If more space is needed, your employer may attach a list of medical facilities to this leaflet and write, "See attached list" in the above space. If this information changes, your employer must update it within 24 hours.

**REMEMBER:** You DO NOT have to pay for medical care if you get sick or hurt from pesticides at work.

**EMPLOYERS:** This is the hazard communication leaflet for pesticide handlers. Fill in the blank lines in this leaflet and display a copy of this handout at a central location in the workplace (such as an employee break room). This leaflet must also be posted at all permanent decontamination facilities and decontamination facilities serving 11 or more handlers. If requested, you must read this leaflet to an employee in a language the employee understands.

“You have the right to look at pesticide use records, applicable pesticide safety series leaflets, and SDSs for all the pesticides used in the last two years where you work....”

These records are kept at....



## Where Are You Required to Keep Pesticide Labels

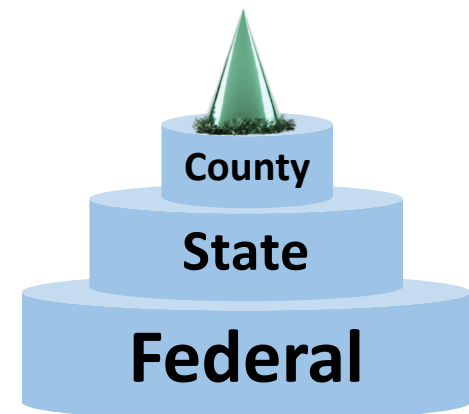
- **Central Display.** Information from the pesticide label, application specific information and Safety Data Sheets are required to be displayed.





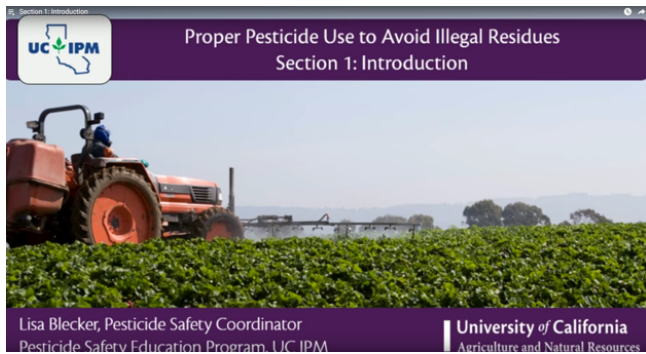
## The Label is the Law

- But that's just the half of it

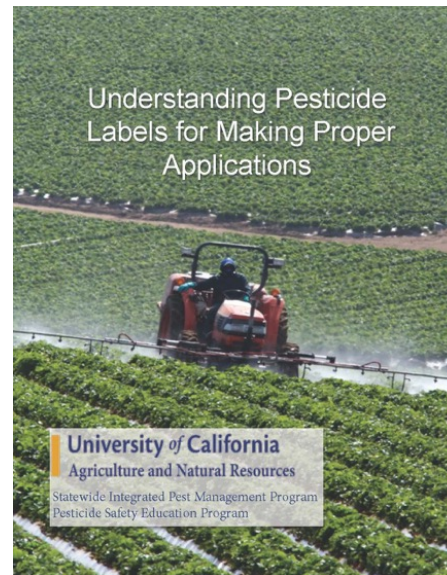




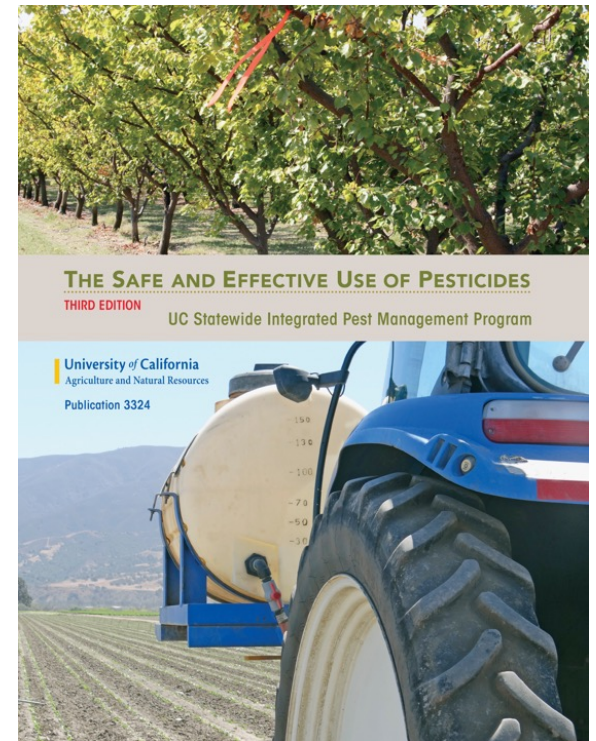
# Resources for You



[http:// ipm.ucanr.edu/training](http://ipm.ucanr.edu/training)



<http://ipm.ucanr.edu/IPMPROJECT/pesttrain.html>



<http://anrcatalog.ucanr.edu/>



## Questions?

Lisa Blecker

Pesticide Safety Education Program Coordinator

UC Statewide IPM Program

[pesticidesafety@ucanr.edu](mailto:pesticidesafety@ucanr.edu)

<http://ucanr.edu/TrainMe>