

# PESTICIDE SAFETY



Information

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

A No. 3

## Closed Systems, Enclosed Cabs, and Water-Soluble Packaging on Farms

**If you hand-pour or mix a dangerous pesticide, you are at great risk of getting hurt or sick.**

There are additional safety rules you must follow when working with these pesticides. Your employer must make sure you know these rules before you use these types of pesticides.

There are many ways to protect yourself when mixing, loading, and applying pesticides. You must follow label directions, wear the right kind of clothes and personal protective equipment (PPE), and use the right kind of equipment. There are special kinds of equipment and packages for dangerous pesticide to help keep you safe.

### Here are Three Special Kinds of Extra Protection from Dangerous Pesticides

#### 1. CLOSED SYSTEMS

A “closed system” is equipment that takes the pesticide out of its container for you and then rinses the container. If you use the machine properly, it prevents the pesticide from touching you. It also moves the pesticide into the application tank and then rinses the containers and hoses for you. Before you use a closed system, you must be trained how to use it and what safety rules to follow.

#### When should I use a closed system?

You must use one if:

- The label requires a closed system; or



- You mix liquid pesticides with the word “DANGER” on the label; or
- You mix any Minimal Exposure Pesticide (see the A-6 safety leaflet for more information on this).

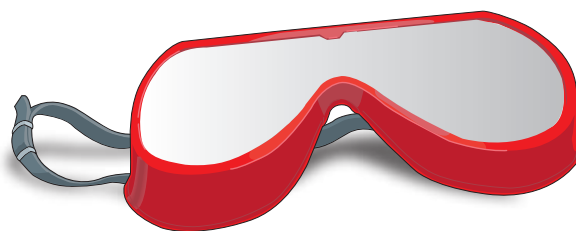
If you are mixing or loading the contents from a single original container of one gallon or less a day, you do not have to use a closed system.

---

### If I use a closed system, do I still need to wear personal protective equipment (PPE)?

You should always wear eye protection, even when using a closed system. But sometimes you can wear different PPE. Pesticide labels and California laws list what PPE you need for certain pesticides. There is a chart on this sheet that lists the kinds of PPE you can wear when using a closed system. Even if you don't have to wear all the PPE on the label when using a closed system, your employer must make sure the PPE is at the place where you mix and load pesticides in case of an emergency.

---



### Who takes care of a closed system?

Your employer must make sure the closed system is working properly and is regularly cleaned. It will not protect you if it is not working right. You have the right to wait until it is fixed before you work with the pesticide.

### 2. ENCLOSED CABS

An “enclosed cab” is a place where you can sit and be protected while pesticides are being applied around you. Enclosed cabs can be the cockpit of a crop duster, or any tractor, truck, or car with windows and doors that can close. Enclosed cabs should keep you from touching anything outside that has pesticide on it. Pesticide applicators, pilots, and flaggers can help protect themselves by using enclosed cabs.

There are two types of enclosed cabs—

- Cabs that have only the doors and windows to protect you. There is nothing to clean the outside air that comes in so you are not protected from breathing in pesticides.
- Enclosed cabs that also have special air filters that can keep you from breathing pesticides.

### 3. WATER-SOLUBLE PACKAGING

Water-soluble packaging is a special pesticide container or package. Both the package and the pesticide dissolve when you put the package in water. Using pesticides in water-soluble packaging protects you the same as a closed system does. But if the pesticide has the word “DANGER” on the label, you must also use a closed system if you moving or loading the diluted pesticide into another tank. **NEVER cut open a water-soluble package**, even if you only want to use part of it. This puts you in great danger of getting the pesticide on you and becoming sick or hurt.

---



**PERSONAL PROTECTIVE EQUIPMENT YOU NEED  
WHEN USING CLOSED SYSTEMS, ENCLOSED CABS,  
OR WATER-SOLUBLE PACKAGING**

If you use	You may use <sup>1</sup>	Instead of this
Closed system for pesticides with “Danger” or “Warning” <sup>2</sup>	Coveralls, chemical-resistant gloves, chemical-resistant apron eye protection	PPE required on pesticide labeling, regulation, and restricted material permit condition
Closed system for pesticides with “Caution” <sup>2</sup>	Work clothing (shirt, pants, shoes) eye protection	PPE required on pesticide labeling, regulation, and restricted material permit condition
Enclosed cab	Work clothing and respiratory protection required on the label	PPE required on pesticide labeling, regulation, and restricted material permit condition
Enclosed cab acceptable for respiratory protection <sup>3</sup>	Work clothing	PPE required on pesticide labeling, regulation, and restricted material permit condition

- 1 For any substitution, all PPE required by the label, regulation, and restricted material permit condition, must be available on site in case of an emergency.
- 2 Using pesticides in water-soluble packages is considered the same as mixing with a closed system. However, transfer from mix tank to application tank must be made with a closed system.
- 3 This type of enclosed cab must meet American Society of Agricultural and Biological Engineers (ASABE) standards. For more information, see “Engineering Controls” at [www.cdpr.ca.gov](http://www.cdpr.ca.gov).



*If you don't get all the information you need in your training, you should call your County Agricultural Commissioner, or the Department of Pesticide Regulation (DPR) for more information. You can find the Commissioner's number in your local white pages phone directory, by calling 1-87PestLine, or at:*

<http://www.cdpr.ca.gov/exec/county/countymap/>

**DPR's Regional Offices are:**

- Northern (West Sacramento) 916/376-8960
- Central (Clovis) 559/297-3511
- Southern (Anaheim) 714/279-7690

**Pesticide Complaint?**

**1-87PestLine**  
INFORMATION LINE



**1-877-378-5463**