

Personal Protective Equipment & Respirator Requirements

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Personal Protective Equipment (PPE)

- Minimize human body contact with pesticides or pesticide residues
- Provided by the employer
- Separate from, or in addition to, work clothing
- Includes:
 - Chemical resistant suits
 - Chemical resistant gloves
 - Chemical resistant footwear
 - Chemical resistant aprons
 - Chemical resistant headgear
 - Protective eyewear
 - Coverall (one- or two-piece garment)
 - Respiratory protection devices

Chemical Resistant Suits



OSHA Requirements

- 80°/85° heat stress regulation (separate from Cal OSHA Heat Illness Standard) applies when wearing chemical-resistant suits.
- Exemption for closed systems, enclosed cabs, or other engineering thermal controls or cooled PPE.
- Title 8 CCR 3395



OSHA QUICK CARD
 Protect Yourself
Heat Stress

When the body is unable to cool itself by sweating, severe heat-related illnesses such as heat stroke or heat exhaustion and the more serious heat stroke can occur, and can result in death.

Factors Leading to Heat Stress
 High temperature and humidity, direct sun or heat, limited air movement, physical exertion, poor physical condition, some medicines, and inadequate tolerance for heat workplaces.

Symptoms of Heat Exhaustion
 • Headaches, dizziness, lightheadedness or fainting
 • Weakness and muscle aches
 • Muscle cramps such as an irritability or confusion
 • Upset stomach or vomiting

Symptoms of Heat Stroke
 • Dry, hot skin with no sweating
 • Mental confusion or losing consciousness
 • Seizures or convulsions

Preventing Heat Stress
 • Know signs/symptoms of heat-related illnesses; monitor yourself and coworkers.
 • Drink cool, moist water or other fluid sources.
 • Use cooling fan/air conditioning, rest regularly.
 • Drink lots of water; about 1 cup every 15 minutes.
 • Wear lightweight, light-colored, loose-fitting clothes.
 • Avoid alcohol, caffeinated drinks, or heavy meals.

What to Do For Heat-Related Illness
 • Call 911 (or local emergency number) at once.
 • When waiting for help to arrive:
 • Move the worker to a cool, shaded area.
 • Loosen or remove heavy clothing.
 • Provide cool drinking water.
 • Fan and mist the person with water.

For more complete information:
OSHA
 Occupational Safety and Health Administration
 U.S. Department of Labor
 www.osha.gov 800.333.3333

Chemical Resistant Gloves

- Employees are mixing, loading, or applying pesticides by hand or ground rig
- Employees exposed to application equipment (such as but not limited to aircraft, hoppers, tanks, or lines) that contains or is contaminated with pesticide



Chemical Resistant Gloves

- Must use glove material as specified by a category on the product labeling
- Must be 14 mils or thicker

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

Chemical Resistant Gloves



Chemical Resistant Gloves

- Exemptions to 14 mils requirement:
 - Barrier laminate and polyethylene materials
 - When chemical-resistant gloves are used to make fine adjustments to equipment or other activities that require high dexterity and motor control skills
 - Gloves must be made of an appropriate barrier material
 - Only used for a maximum of 15 minutes
 - Gloves may only be used once for such specific tasks and must be discarded and not reused after the task is accomplished

Chemical Resistant Gloves

- Separable glove liners made of cotton or other absorbent materials may be worn under chemical-resistant gloves unless prohibited by label.
- Liners must not extend beyond the end of the chemical resistant glove
- Must be disposed of at the end of the work day or immediately if the liner comes in contact with pesticide during the work day

Chemical Resistant Gloves

- Flocked gloves or those with other types of non-separable liners are prohibited



Chemical Resistant Gloves

- Leather gloves may be worn over chemical resistant gloves if required by the work environment. After such use, those leather gloves must always be worn over chemical resistant gloves.



Chemical Resistant Footwear

- Chemical resistant footwear must be worn when required



Chemical Resistant Footwear



Chemical Resistant Apron

- Must cover the front of the body from mid-chest to the knees.



Chemical Resistant Headgear

- When headgear is required by label
- Can be a chemical-resistant hood or wide-brim hat



Protective Eyewear

- Must be ANSI Z87.1 compliant
- Provides brow and temple protection, conforming to the curvature of the face
- If not specified by the label, can be:
 - Safety glasses that provide front, brow, and temple protection
 - Goggles
 - Face shield
 - Full face respirator

Protective Eyewear



Coveralls

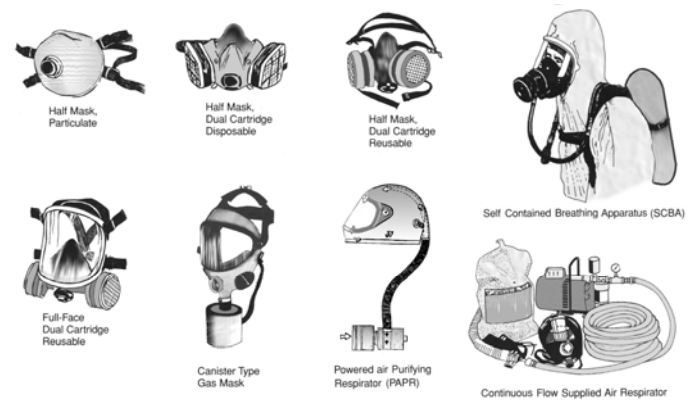
- One- or two-piece garment of closely woven fabric or equivalent that covers the entire body except the head, hands, and feet
- Handling pesticides with the signal word “Danger” or “Warning”
 - Except when using fumigants unless the label requires the use of coveralls
- Provided by the employer



Respirators

- Required by label, regulation or employer
 - Respirator Program Administrator
 - Written Respiratory Program
 - Respirator Selection and Fit Testing
 - Medical Evaluation
 - Facepiece Seal Protection
 - Cleaning, Inspecting, Repair and Storage
 - Employee Training & Program Evaluation
 - End of Service Life Replacement
 - Record Keeping
 - Medical Evaluation Questionnaire
 - Voluntary Respirator Provision posting (Subsection (r))
 - Medical Recommendation Form

Respirators



Voluntary Respirator Use

- Employer Provided
 - Written Respiratory Program
 - Medical Evaluation
 - Cleaning, Inspection, Repair, and Storage
 - Record Keeping
 - Medical Evaluation Questionnaire
 - Voluntary Respiratory Provision posting (Subsection (r))
 - Medical Recommendation Form
- Employee Provided
 - Voluntary Respiratory Provision posting (Subsection (r))

PPE Exemptions

- Exemptions and substitutions to PPE required by labeling or regulation
- Must be present and available for use at the worksite and stored
- Chemical-resistant gloves and protective eyewear are not required when:
 - Applying in an enclosed cab;
 - Using a vehicle-mounted or towed equipment with spray nozzles that are located below the employee and directed downward
 - Applying vertebrate pest control baits using long-handled implements that avoid actual hand contact
 - Working in situations where the handler has no liquid contact with a fumigant
 - Using an application system approved by the Director that is providing the same level or greater protection as PPE
 - Operating an aircraft

PPE Exemptions

- Protective eyewear is not required when
 - Applying non-insecticidal lures or baiting insect monitoring traps
 - Applying solid fumigants (i.e. aluminum phosphide) to vertebrate burrows
 - Applying vertebrate pest control baits that are placed without being propelled from application equipment

PPE Exemptions

- Protective eyewear, coveralls, chemical resistant gloves, and a chemical resistant apron may be worn instead of PPE required by product labeling when using a closed mixing system to handle pesticides with the signal word “Danger” or “Warning”
 - Includes mixing pesticides packaged in water-soluble packets
- Protective eyewear and work clothing may be worn instead of PPE required by label with using a closed system to handle “Caution” products
- Work clothing may be worn instead of PPE required by label when occupying an enclosed cab.
 - Respirator use is not except unless it’s a TC-84A or a dust/mist respirator

PPE Violations



PPE Violations



PPE Violations



Reminder – Triple Rinse!

- Each emptied container that has held less than 28 gallons of a liquid pesticide that is diluted for use shall be rinsed and drained into the spray tank by the user at the time of use.



Service Container Labeling

- The name and address of the person or firm responsible for the container
- The identity of the pesticide in the container; and
- The word “Danger,” “Warning,” or “Caution” in accordance with the label on the original container

Questions?