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PB654-Safe Pesticide Practices

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Agricultural Extension Service
The University of Tennessee

PB654

Safe Pesticide Practices

Safe Pesticide Practices

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Entomology & Plant Pathology

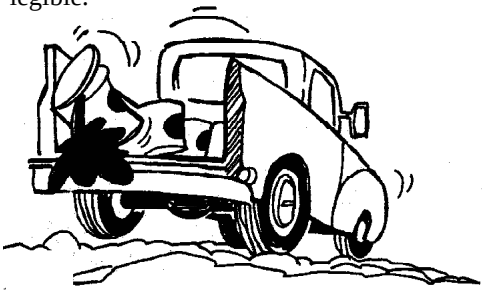
Safe use of pesticides is everyone's responsibility. As the user, however, you have the major responsibility. Your attitude and actions may save someone from a tragic or fatal poisoning. The following topics cover the basic points of pesticide safety.

Safe Storage of Pesticides

- Provide exhaust fan and/or vents.
- Store in a cool, dry, well-ventilated, secure and insulated building.
- Transfer deteriorating and damaged packages to other containers that originally held the same pesticide and has the same label intact.
- Keep containers tightly closed.
- Know type, formulation and potential dangers of pesticides.
- Do not store clothing, respirators, lunches, cigarettes or drinks with pesticides.
- Keep clean up and decontamination supplies available.
- Store pesticides on pallets or shelving.
- Use metal or plastic shelving.
- Store herbicides and volatile products away from other pesticides.
- Store in original containers.
- Keep an up-to-date inventory of the pesticides in storage.

Safe Transportation of Pesticides

- Transport pesticides securely in the back of a truck.
- Do not carry near groceries.
- Do not allow children to ride near pesticides.
- Do not allow pesticide containers to shift or rol in transit.
- Do not carry pesticides with feed or mash for livestock.
- Do not carry pesticides inside truck cab or car.
- In case of spills, clean up immediately.
- Never leave a vehicle unattended.
- Make sure labels are intact, undamaged and legible.



Personal Protective Equipment (PPE)

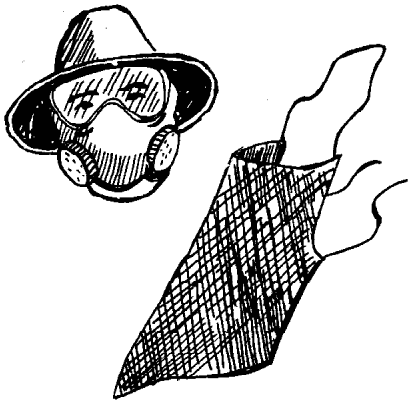
(Depends on the job and pesticide)

For Protection During Mixing, Wear:

- Clean clothing - full skin coverage, closed at the neck and wrists and plant legs outside boots.
- Waterproof gloves with long, tight-fitting wrists.
- A wide-brimmed hat.
- Waterproof boots.
- An approved respirator with the right cartridge when mixing dust or wettable powder (WP), as required by label.
- Safety goggles as required by the label.
- A rubber or plastic apron.

For Protection During Application, Wear:

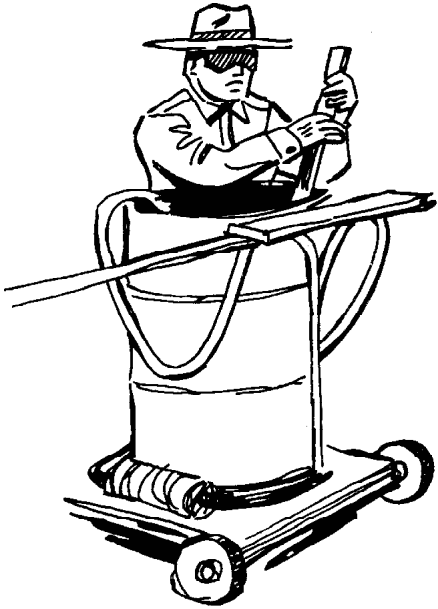
- Clean clothing – full skin coverage, closed at neck, wrists and plant legs outside boots. (Waterproof clothing should be worn when using extremely toxic materials.)
- Waterproof gloves with long, tight-fitting wrists.
- A wide-brimmed hat.
- Waterproof boots (no canvas or leather shoes).
- Wear PPE required on the label.
- Approved respirator with right cartridges and safety goggles if required by the label.



Safe Mixing Procedures

- Protect your skin with proper clothing and equipment.
- Weigh or measure materials accurately.
- Fill tank with water until about one-half full.
- Add concentrate gradually while water is swirling; do not spill or splash. Put measuring cup in a large container.
- Always stand well above fill hole to keep splashing off face and eyes.
- Store remaining chemical in original labeled container.
- Place pesticide containers and bags back in storage building and lock.
- Empty concentrate container. Pressure rinse or rinse and drain three times and pour rinses into mixing tank.
- Rinse measuring containers three times.
- Dispose of empty container properly.

- In case of spill – Remove contaminated clothing, wash chemical from skin with soap and water immediately and clean up area. Launder contaminated clothing separately from family laundry.
- Finished mixing – follow recommended cleanup and sanitation procedures.
- Always have someone with you in case of an accident.



Safe Application Procedures

- Wait until pesticide is needed.
- Read all labels.
- Wear clean full coverage protection and PPE required by the label.
- Change clothing after leaving field and bathe before doing other chores.
- Never smoke, eat or drink while applying pesticides.
- Accidental spill – wash skin immediately (soap and water).
- Avoid breathing dust or fumes.
- Know poisoning symptoms of pesticide use and know where to get medical help. Take pesticide label or container with you to the doctor.
- Calibrate equipment.
- Use spray rather than dust, or reduce drift.

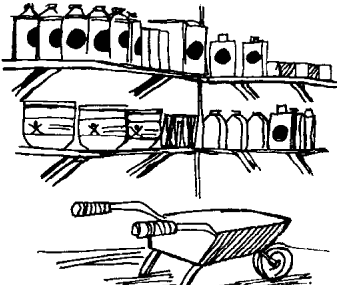
- Carry a decontamination kit or spray rig – a jug of water, soap and paper towels and eyewash bottle.
- Observe minimum days from application to harvest or slaughter.

Restricted Entry Precautions

Read and follow the label on safe restricted entry period. Wear protective clothing listed on the label on premature entry.

Cleanup and Good Housekeeping

- Provide washing facilities.
- Correct disorders: leaky containers, damp spots, loose caps, etc.
- Decontaminate and dispose of empty pesticide containers safely.
- Wear protective clothing for handling routine and emergency situations.



Pesticide Disposal

- Buy only the amount of pesticide you need for the season.
- Mix only as much pesticide as needed. If too much is mixed, apply leftover material to labeled site or a border row.
- Rinsing – Pressure rinse or rinse three times with about a quart of water and pour rinse into spray tank before bringing to desired level.
- Small containers – after decontaminating, puncture, crush or break, and bury in an approved sanitary landfill. Return 30 and 55 gal. drums to be reconditioned.
- Leftover pesticides – Dispose in an approved sanitary landfill, incinerator or store until the following year in a locked storage building.

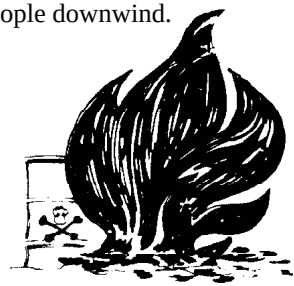
Emergency Procedures for Spills and Fires

- Take off contaminated clothing and wash separately from the family laundry. Dispose of contaminated clothing exposed to highly toxic chemicals.
- Wash or rinse contaminated body immediately – then get to a doctor. Take the label or pesticide container with you to the doctor.
- Protect yourself from exposure and clean up spill.
- Only allow those helping in cleanup into contaminated area.

- Wear protective clothing – at least waterproof gloves, clothes and footwear; in some cases, respirator and other equipment. See the label.
- Contain spill with containment snakes, soil, soda or absorbent materials.
- Clean Up – Use cat litter, clay sawdust, soda ash or an absorbent cleaning compound to soak up spilled pesticide.
- Sweep and shovel all contaminated material into a fiber container and cover the container.
- Wash contaminated area with full-strength liquid chlorine bleach. Use long-handled brush or broom.
- Thoroughly flush contaminated area with water
- Bury container in an approved sanitary landfill or incinerate.

Precautions in Case of Fire

- Inform firefighters that poisonous materials are involved.
- Beware of explosives.
- Use foam, dry chemicals or carbon dioxide to fight pesticide fires.
- Keep upwind of smoke unless you use a respirator and protective equipment.
- Warn people downwind.



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