

ILO Toolkit Control Sheet P100 Pesticide Control approach 2

Protective equipment

Handling concentrated pesticides for protection of plants

Scope

This control sheet is part of the ILO Chemical Control Toolkit. You should use it when the toolkit recommends control approach 2 - personal protective equipment for using pesticide. The sheet gives good practice advice on exposure control. It can be applied to all tasks in handling and diluting pesticide concentrates. It describes the key points you need to follow to help reduce exposure to an adequate level. For certain pesticides, your local authority or environmental agency may impose waste handling rules. This sheet identifies the minimum standards to protect your health. It should not be used to justify a lower standard of control than that which may be required by the pesticide label. That label often has detailed information, which you should always follow.

Access

- Make sure someone else knows what you are doing. Keep unnecessary people away from the work area.

Design - environment

- Keep pesticides stored securely in a dry place that is capable of retaining spills. Post warning signs.
- Keep other people away while you are handling pesticide concentrates. The working space should be wide enough to comfortably contain the equipment and materials needed. You must not handle concentrates in your home or in food stores.
- Handle concentrates where any spillages will be caught – do not allow concentrate to enter the soil or drains.

Design - product

- Only buy liquid pesticide concentrates in containers that are easy to pour from, that do not dribble and do not trap pesticide concentrate spills in any rim.
- Only buy wettable powders in a wide-necked waterproof container from which you can scoop the concentrate into the dilution jug.

Mixing and loading the application equipment.

Portable equipment (e.g. knapsack or compression sprayer, fogger)

- Ensure the applicator is working without leaks before you start handling pesticide. Mend the equipment before use, if you suspect that it is not working properly.

- Check carefully your calculations on the quantities to mix. Make up only as much pesticide as you are likely to need.
- Close the pesticide concentrate container. Don't leave it unattended.
- Wipe your gloves free of concentrate before handling the applicator, the cap and the spray lance. Burn used wipes at the end of the day.
- Make up liquids by adding concentrate to some water or solvent in the application equipment. Take care not to spill pesticide concentrate on the outside of the applicator. Wash out the measuring jug and put the washings into the applicator and mix. Then fill with fresh water or solvent to make the quantity of mix required.
- Make up powders by preparing a thin paste with water or solvent in the measuring jug, and proceed as for liquids. If not well dispersed, powders will block a spray nozzle.
- Make sure that pesticide cannot not leak from the applicator.

Tractor-trailed sprayer

- For spraying with a tractor-trailed sprayer, the same guidance applies. The best practice is to fit an induction bowl for mixing and loading.

Protective equipment

- Check the product label or material safety data sheet or ask your supplier to tell you what personal protective equipment you need.
- **Where the concentrate is toxic or corrosive:** use a hooded coverall, apron, gloves, boots, and a face shield. If the product is volatile or dusty, use a respirator.
- **Where the concentrate is harmful or irritant or unclassified:** use a hooded coverall, gloves, boots, and a face shield.
- You must protect yourself from contact with pesticide concentrate. Wipe off any splashes immediately, and wash yourself down before taking off your protective equipment. Burn used wipes at the end of the day.
- If you use disposable protective gloves, discard them as soon as you have finished making up the diluted solution. Throw disposable gloves away every time you take them off.
- If you use non-disposable gloves, wash them well in soapy water before taking them off, then wash them inside and outside, and hang them up to dry. Throw the gloves away after using them for a week even if they are not worn out.
- Wash your coveralls at the end of the day.
- Look after your protective equipment. When not in use, keep it clean and store it in a clean, safe place, separate from normal clothing. Change your protective equipment when it is damaged.

Cleaning and housekeeping

- Only keep the minimum amount of pesticide in a safe place where the container won't get damaged.
- Put lids on concentrate containers immediately after use. You are likely to contaminate your hands doing this.
- **Clean up all spills** – use sand or absorbent material, and shovel the waste into a sealed and marked container.
- Don't clean up dusts with a brush or compressed air.
- **Make contingency plans** – know what to do if there were a spillage of concentrate.
- Look after your application equipment. After use, wash it out with water, ensure that spray nozzles are clean, and store the applicator in a clean, safe place. The washings must not enter the soil or drains.
- Never re-use a pesticide concentrate container. (**See P104 for disposal**).

Training and supervision

- Tell your workers about any harmful properties of the substances they are working with and if they need to use personal protective equipment, why this is so.
- Tell your workers what symptoms to watch out for, and who to tell if they experience these.
- Teach your workers what to do if something goes wrong.