

# MANAGING EMPTY PACKAGING







This brochure is made available by the COLEAD to fruit and vegetable producers and exporters in the ACP (Africa, Caribbean, Pacific) countries. The instructions illustrated in the following pages are aimed at producers who would like to properly manage the empty packaging of their plant protection products.

It lists the main recommendations for rinsing empty packaging, for not reusing it and for its safe disposal. Appropriate collection and disposal of empty plant protection product containers is indeed important to avoid contaminating humans or animals and polluting the environment.

Brochures on other subject areas are also available from (www.colead.link).

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#### INTRODUCTION

Complete emptying and rinsing of the packages and containers of plant protection products:

- ensures that all the product is used to protect the crops;
- makes it possible to retrieve 99.9% of the product;
- will allow the products to be disposed of more safely and with less risk of polluting the environment.

In order to reduce the risk, the most important task is to rinse the packaging properly. It is absolutely necessary to rinse plastic bottles three times with clean water.

It is very dangerous to reuse containers. Even when emptied and rinsed, the plastic material can release traces of the toxic product in the liquid kept in these bottles. There is a real risk of poisoning!

It is thus recommended to render them unusable immediately after use, by punching holes in them (with a nail or knife) or by crushing them.

Empty plant protection product packages must not be mixed with household waste, even if they have been rinsed. There is a risk that they may be reused.

In order to avoid burning contaminated packaging under bad conditions, which would produce dangerous smoke, it is recommended to crush them and bury them in a pit specially set up for this purpose.

The pit must be dug on high and flat land, at least 30 to 60 metres away from any free water supply such as a watercourse, lake, dam or well. The pit must be located at least 50 m away from homes, other buildings and crops. It must be located on a site that is not at risk from flooding and that will not deteriorate following erosion.

Make sure that the pit is sufficiently deep and that this area is protected against animals.

# LIST OF MESSAGES AND INSTRUCTIONS TO MANAGE THE EMPTY PACKAGING OF PLANT PROTECTION PRODUCTS SAFELY

## RINSE AND PUNCTURE EMPTY PACKAGES AND CONTAINERS IMMEDIATELY AFTER USE

- 1. Empty the containers completely when preparing the mixture.
- 2. Rinse bottles at least three times with water as soon as they are empty.
- 3. Empty the rinsing water into the sprayer tank when preparing the spray mixture.
- 4. Do not let the rest of the product dry in the container.
- 5. Puncture bottles immediately after rinsing to make sure they are unusable.

#### **COLLECT AND GROUP PACKAGING TOGETHER**

- 1. Do not reuse any large cans or metal barrels that contained products.
- 2. Collect and group together empty and rinsed packaging.
- 3. Preferably place the packaging in plastic bags before disposal.
- Store empty packaging under lock and key in a safe place while waiting for it to be destroyed.
- 5. Provide a place in the plant protection product storeroom for the empty packaging.
- Set up a concrete pit away from the buildings which is fenced off and closed with a padlock.

#### DO NOT THROW AWAY OR ABANDON PACKAGING

- 1. Never throw away or abandon packaging in the countryside.
- 2. Do not abandon packaging around the buildings.
- 3. Never burn packaging, but bury it under appropriate conditions.
- Bury the packaging in the ground, away from any homes or water sources, at a depth of at least 80cm.
- 5. Avoid burying the packaging if the water table is close to the surface of the ground.



## RINSE AND PUNCTURE PACKAGES AND CONTAINERS IMMEDIATELY



## EMPTY THE CONTAINERS COMPLETELY WHENMAKING UP THE MIXTURE

- Let the bottles drain for at least 30 seconds, in order to collect the last drops.
- For granules and powders, empty the packages (boxes or sachets) by shaking them over the tank
- Avoid dust, as this is a source of contamination.



# RINSE BOTTLES AT LEAST THREE TIMES WITH WATER AS SOON AS THEY ARE FMPTY

- Fill the empty bottle a third of the way up with water.
- Replace the top and tighten it well.
- Swill the water around inside the packaging by rotating it, then shake vigorously to rinse all the inside walls
- Empty the rinsing water into the sprayer tank.

Do not let the rest of the product dry in the packaging, as it will be very difficult to remove it by rinsing.



## PIERCE BOTTLES IMMEDIATELY AFTER RINSING THEM

- Never reuse the bottle as a flask, or to store other liquids (oils, fuel).
- Pierce the bottle with a nail or a knife, without hurting yourself.

This ensures that the bottle cannot be used for another purpose. Even when rinsed, the packaging still contains traces of toxic product.

#### **COLLECT AND GROUP TOGETHER PACKAGING**



## DO NOT REUSE LARGE CANS OR METAL BARRELS OF PRODUCTS

 Never use empty plant protection product containers to draw or store water, even if they have been rinsed well.

The metal barrels emptied of their plant protection products must never be used as construction material or to make barbecues.



## COLLECT AND GROUP TOGETHER EMPTY AND RINSED PACKAGING.

- Collect empty packaging after rinsing it.
- Group it together in a dry place with no risk of flooding and far away from watercourses, before destroying it.
- Preferably place the packaging in plastic bags before disposing of it.



#### STORE EMPTY PACKAGING UNDER LOCK AND KEY IN A SAFE PLACE WHILE WAITING FOR IT TO BE DESTROYED

- Provide a place in the warehouse where the plant protection products are stored to keep the empty packaging.
- Set up a concrete pit away from the buildings which is fenced off and closed with a padlock.
- Put up pictograms to indicate the presence of dangerous products.

This will prevent theft or contact with animals.

#### DO NOT THROW AWAY OR ABANDON PACKAGING



### NEVER THROW AWAY OR ABANDON PACKAGING IN THE COUNTRYSIDE.

- Never abandon empty packaging in fields.
- Never throw away the empty packaging in household waste disposal sites, in pits or in river beds
- Avoid dust, which is a source of contamination.

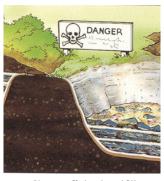
This will prevent pollution of the environment caused by traces of the product and by the packaging itself.



## DO NOT ABANDON PACKAGING AROUND THE BUILDINGS

- Collect empty packaging immediately and place it in plastic bags.
- Keep the area around storerooms and buildings clean in order to avoid vermin, accidents and fires

Keeping the premises clean is the first way to prevent accidents.



#### DO NOT BURN THE PACKAGING, BUT BURY IT UNDER APPROPRIATE CONDITIONS.

- Pierce then crush the packaging.
- Bury the packaging in the ground, away from any homes or water sources, at a depth of at least 80 cm
- Never leave the packaging on the surface of the ground but cover it with earth.
- Close off the landfill site in order to prevent access to it.
- Indicate the landfill pit with a sign.

#### AGRICULTURAL PRODUCTION AND PROCESSING MANAGING EMPTY PACKAGING

**NOTES** 

#### COLEAD E-LEARNING PLATFORM

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