

# Industry Guidelines for EPA Container Rule Implementation

- Acceptable Containers
- Cleaning Instructions

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## Registrant Description of Acceptable Containers

Registrant must develop a description of acceptable refillable containers (portable and stationary containers) that can be used for distributing or selling bulk products.

Registrant must identify the containers by specifying:

1. materials of construction that are compatible with the pesticide formulation; and
2. information necessary to confirm compliance with the adopted DOT standards, serial number or other identifying code mark requirement, one-way valve /tamper-evident requirement of a portable pesticide container.



# Bulk

H A N D L I N G

H A N D L I N G  
G U I D E

G U I D E

Each registrant provides stationary bulk tank requirements for their products through a bulk manual or guide.

# Registrant Description of Acceptable Containers

**CLA Stewardship Committee and EPA have developed an “Industry Guideline” for acceptable Portable Refillable Containers.**

- Provide **refillers** with a way to easily determine what container can be used with a particular product.
- Provide **registrants** an easy way to communicate what is acceptable.

## Portable Refillable Containers for Registered Liquid Pesticide Products

All portable refillable containers (PRCs) used for pesticide distribution are required to include safety and design standards. These standards are:

1. All PRCs must meet the US Department of Transportation requirements for hazardous material packages at the Packing Group III level or higher.
2. All vents in refillable containers must be designed to minimize the amount of material that could be introduced through the vent.
3. Each non-vent opening must include a one-way valve, a tamper evident device, or both.
4. Containers must be marked with a serial number, or some other unique identifying code.

# CLA/EPA Industry Guideline for Acceptable Containers

	Category 1	Category 2	Category 3	Category 4	Category 5	Category 6
Description:	Blow-molded inner container in cage or shell	Thick Wall container on a protective base	Thick Wall container on legs	Thick wall, Proprietary Design	One Piece Thick Wall Container	One Piece Thick Wall Container
Bottom Discharge	with or without bottom discharge	with or without bottom discharge	with or without bottom discharge	with or without bottom discharge	No bottom discharge	with or without bottom discharge
Round/Square	Square	Square or Round	Square	Square/Round or Custom	Round	Square or Round
Stackable	Yes	Yes	Yes or No	Yes or No	Yes & No	Yes
Options		May have top chime. May be equipped with a pump.		May have top chime. May be equipped with a pump.		
Materials	HDPE bottle & Metal cage	HDPE and LLDPE Plastic	HDPE and LLDPE Plastic	HDPE and LLDPE Plastic	HDPE and LLDPE Plastic	Stainless Steel
UN / DOT Authorization	UN 31HA2	UN1H1, UN3H1, UN31H1, UN31H2,	UN 31H1, UN31H2	UN1H1, UN3H1, UN31H1, UN31H2, None	UN1H1, UN3H1, UN31H1, UN31H2,	UN1A1, UN31A1, DOT 57
Containers in each category include, but are not limited to, those pictured here.						

# CLA/EPA Industry Guideline for Acceptable Containers

## Registrant Description of Acceptable Containers

Use of the CLA/EPA Industry Guideline for Acceptable Containers is voluntary for registrants.

The level of control for each product may be different based on market / stewardship needs.

- Certain products may require dedicated mini-bulks
- Some Products will require special fittings (Micromatic or Parker-Hannifin valves)



# CLA/EPA Industry Guideline for Acceptable Containers

## **Product A**

**Containers in compliance with CLA/EPA Types 1,2,3,4,5, and 6 are acceptable for Product A**

## **Product B**

**Containers in compliance with CLA/EPA Types 2, and 4 that are new or that have previously held a high application rate corn herbicide are acceptable for Product B**

## **Product C**

**Containers in compliance with CLA/EPA Type 4 which include a Micromatic valve and a Taylor-Cain recirculation valve.  
Only refill containers that are new or that have previously held Product C.**

# Registrant Refilling Residue Removal Procedure

## Cleaning

Registrants must develop a residue removal procedure that describes how to remove pesticide residue from refillable containers before refilling.

The procedure must be adequate to ensure that the composition of the pesticide product does not differ from its Confidential Statement of Formula.

The procedure must describe how to manage any rinsate resulting from the procedure if:

- (1) The procedure requires the use of a solvent other than the diluent used for applying the pesticide, or
- (2) there is no diluent used for application.

# Registrant Refilling Residue Removal Procedure

**CLA Stewardship Committee and EPA have developed an “industry Guideline” for acceptable cleaning instructions.**

- Provide refillers with a way to efficiently clean containers.
- Provide an easy way for registrants to communicate what is an acceptable cleaning procedure.
- The cleaning procedures will require modification for particular products.

# Registrant Refilling Residue Removal Procedure

## Information to assist refillers

- Guidelines for determining if a container requires cleaning,
- Cleaning by applicators,
- EHS review,
- Container inspection,
- Soaps and cleaners,
- Quality standards,
- Cleaning instructions

# Registrant Refilling Residue Removal Procedure

## CropLife America's Guidance for Safely Cleaning Refillable Pesticide Containers for Refilling or Rededication



### Is the pesticide container refillable?

To verify the pesticide container is refillable, read the marks & labels found on the containers. A non-refillable pesticide container must not be refilled.

*EPA rules found in 40 CFR Section 156.140(a) require the labels for pesticide products distributed in non-refillable containers include: (i) "Nonrefillable container" and (ii) a statement about reuse. Additionally, 40 CFR Section 156.140(b) requires the labels for pesticide products distributed in refillable containers to include: (i) "Refillable container." (ii) "Refill this container with pesticide only." or "Refill this container with [common chemical name] only."*

# Registrant Refilling Residue Removal Procedure

## Ask the applicator to rinse the container during the last application

The last time the container is used, authorize the applicator to remove any tamper evident devices & completely rinse the container into the application equipment and apply all pesticide according to label directions. To prevent pesticide from drying on the container surface, it is important to clean the container as soon as possible after emptying.



*The following instructions for cleaning refillable pesticide containers for container disposal (found under storage & disposal on the label) can be used to field rinse containers prior to refilling or rededication: "To clean the container; fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times." This may eliminate the need for additional cleaning.*

**NOTE:** Containers that are to be rinsed field rinsed by growers & applicators may be marked by refillers; such as, "remove tamper evident device and thoroughly rinse pesticide residue into application equipment".

# Registrant Refilling Residue Removal Procedure

## Quality Standards

To meet the minimum quality standards required for any pesticide product (described in the product's registration formula statement) products can only be filled into clean, dry containers free from residue, or containers that held the same or similar products. Additionally, EPA must be notified if other pesticides have adulterated products above levels of concern (see [http://www.epa.gov/opppmsd1/PR\\_Notices/pr96-8.html](http://www.epa.gov/opppmsd1/PR_Notices/pr96-8.html)). To prevent cross contamination, products with dissimilar uses or formulations should not be used in the same container. Here are some general recommendations.

### Recommendations:

*Whenever possible, dedicate containers to a single product or similar product as defined by the product's registrant. Do not put corn herbicides in containers used for soybean herbicides and vice versa. Do not put fungicides or insecticides into herbicide.*

*Be certain containers are completely dry (no water) before filling with Emulsifiable Concentrates (ECs) i.e., products having non-water solvents.*

*Do not put microencapsulated formulations into containers that contained ECs or that may have solvent residue.*

*Use the pesticide panel label and container's unique identifier to keep track of the product previously in a container.*

**NOTE:** Whenever possible dedicate the container to a single product or product category.

# Registrant Refilling Residue Removal Procedure

## Cleaning Instructions

1. **Visually inspect** all containers and any associated transfer equipment and adjust cleaning process appropriately. Containers thoroughly rinsed clean in the application process or dedicated to a single product or similar products, may not require additional cleaning. Damaged containers, containers with visible staining or dried solid residue may need special treatment.
2. **Stage containers on a containment pad** during the cleaning process, so the rinsate can be collected and managed.
3. Use the pesticide product panel label along with the container's unique identifier to **note the pesticide product being cleaned out of that container**. Remove old labels, placards, and tamper evident devices. Alternatively, the panel label can remain on the container and be removed when it is completely cleaned.
4. **Thoroughly rinse or pressure-wash the exterior of the container** to remove dirt and residue. If needed, tank cleaners may be used on the exterior. Wash until all visible residues are completely gone.
5. **If the container has not been field rinsed, rinse any visible residue from inside the container with water**. Then using a sprayer, rinse the interior of the container using only enough water to completely remove the residue. If the container is equipped with an internal pump, **the water must be flushed through the entire delivery system** until the rinsate is clear.



# Registrant Refilling Residue Removal Procedure

6. Drain and collect the rinsate from the container. Repeat high pressure rinsing until container is clean & rinsate is clear. Inspect the inside of the container to determine if additional cleaning is needed.
7. For stubborn residues, hot water with a cleaning solution, such as a commercial tank-cleaning compound suitable for use with pesticides (exempt from a tolerance) may be used. Using a high-pressure sprayer and rinse nozzle thoroughly flush the interior of the container again. If the container is equipped with an internal pump, the tank cleaning solution followed by water must be flushed through the entire delivery system until the rinsate is clear.
8. Inspect the inside of the container. If needed, use a light or mirror to thoroughly inspect and insure visible pesticide residue has been removed. If a tank cleaner was used, insure the last rinse is water only and that the water is flushed through the delivery system.
9. Drain the container. A pump or dedicated wet-dry shop vacuum may be used to remove any remaining rinsate. **Caution:** *If product is a DOT combustible or flammable class 3 (a.k.a. "red label"), use pump or wet-dry shop vacuum only if combustible vapors are not present (verify with a Combustible Gas Indicator).*
10. After cleaning, the container should remain sealed to prevent introduction of foreign material.

# Cleaning before Recycling/Disposal

## Safely Cleaning Refillable Pesticide Containers for Recycling



This guidance is intended for refillers, growers and others who have decided to recycle their refillable pesticide containers. Cleaning the container before recycling (or disposal) is the responsibility of the person recycling or disposing of the container.

(40 CFR§156.156)

