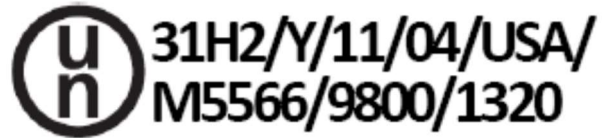


## Portable Refillable Container Inspection and Testing

These container management procedures are designed to assist facilities who refill portable refillable containers with EPA registered pesticides. The requirements are different based on the size of the container. All mini-bulks with a capacity less than 119 gallons (450 liters) are considered “Non-Bulk.” Containers with capacities between 119 and 330 gallons are considered “Intermediate Bulk Containers.”

The US DOT inspection and testing requirements are required for all portable refillable containers of EPA registered pesticides. The recommendations are based on accepted industry standards and regulatory requirements.

Products regulated as hazardous materials by the US DOT can only be shipped in containers that have been tested and authorized for hazardous material use. The authorization is communicated by a “UN” mark on the container.



- Workers cleaning and refilling containers should always wear appropriate protective clothing such as gloves, goggles, and safety garments. Refer to the product label or MSDS for specific information on proper protective equipment to use. It is the refill site’s responsibility to follow all label precautions. The pressure required for these tests may damage and could result in container rupture. Containers should be emptied and cleaned prior to inspection and testing.

### 1. **Inspect and Test Container:**

Equipment Inspection/Replacement (every time container is re-filled): Test and/or inspect pumps, suction tubes, gaskets, hoses, and fittings to ensure that they are not leaking and are in working order - replace or repair if necessary.

#### External Inspection (every time container is re-filled)

Check the outside and where possible, inside of the container for any visible sign of

- rupture, cracks, warpage, corrosion,
- dents or other structural damage,
- pitting or other evidence of reduced wall thickness,
- metal fatigue,
- damaged threads or closures
- damage to the fittings, valves, tamper-evident devices
- containers that do not bear the UN authorization markings or such markings are not legible (some containers larger than 119 gal. are not required to bear these marks)
- containers that do not have an intact and functioning one-way valve or tamper-evident device on each opening other than a vent

#### Pressure (leak) Test: (every 2.5 years for UN authorized Intermediate Bulk Containers).

- Visually inspect each container as identified above (External Inspection). If any damage is detected, the container must be removed from service.
- Inspect the container for broken equipment that may affect the container’s integrity and fix and/or replace broken equipment. Replace or repair if necessary.
- Close all service equipment.

- Replace the vent with a pressure tester fitting.
- Connect testing apparatus. The test apparatus must be able to isolate the pressure in the container.
- Open the air supply until container is holding 3-psi minimum.
- Disconnect air supply.
- Container must hold 3-psi air pressure for five minutes. If the container holds the pressure, then it is qualified for reuse.
- Remove the pressure tester fitting.

An alternative testing process can be performed by maintaining 3-psi while utilizing a soap solution on all openings and all seams.

On Aug. 16, 2011 the leak testing requirements became required for refilling all EPA registered pesticides in UN authorized mini bulk containers equal to or larger than 119 gallons. The EPA has not adopted the leak testing requirement for non-bulk refillables (< 119 gal. capacity).

## 2. Record Keeping:

When conducting a Pressure test on a UN authorized container, keep an inspection/test log at the refill location including package design type and specification, refill site name, address, product name, serial number of container, date of test and or Inspection, inspector name, pass or fail & reason. Keep this log on file for 2.5 years.

The month and last two digits of the year that an Intermediate Bulk Container ( $\geq 119$  gal. capacity) passes an internal inspection and a leak test must be marked near the original UN marking.

Capacity: 832 L  
 Tare: 89 KG  
 Pressure: 180 kPa  
 Leak Test: 03/08  
 Insp.: 03/08

Test and inspection marking must be durable and at least 12 mm in height.