



CONTAINER CLOSURE INSTRUCTIONS FOR UN SPECIFIED CONTAINERS

DISTRIBUTED BY

Heritage-Crystal Clean, LLC

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Pursuant to U.S. Department of Transportation (DOT) requirements of 49 CFR 178.2(c), manufacturers and distributors of UN packages (containers) are required to communicate closing instructions to parties that purchase these containers. This document provides closing instructions include tightening specification for container openings, gasket installation (when applicable), and other requirements specified for particular packages, container types. These closure instructions and specifications are determined by the container manufacturer or subsequent container re-conditioner.

www.crystal-clean.com

Or

(877) 938-7948

**CLOSURE PROCEDURES FOR
CONTAINERS SOLD/DISTRIBUTED
BY HERITAGE-CRYSTAL CLEAN, LLC**

POLY DRUMS (UN)

OPEN HEAD PLASTIC DRUM WITH LEVER LOCK RING.

1. Inspect container, lid & ring for any obvious damage – Do not use damaged container components
2. Ensure lid gasket is present and intact
3. Place locking ring over cover and top lip of drum.
4. Make sure lock ring engages drum properly.
5. Pull locking ring closure toward cover until it snaps in place
6. Secure sealing device through the holes in the latch and lever

CLOSING TORQUES FOR BUNGS IN PLASTIC DRUMS

Buttress plugs (coarse thread) 2" @ 20 ft. lbs.

NPT plugs (fine thread) 2" @ 20 ft. lbs. ¾" @ 9 ft. lbs.

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IBCs (UN) - (aka Totes)

CLOSING INSTRUCTIONS & CLOSING TORQUES

Mauser (Manufacturer)

6" and 9" fill port caps torque to 75 ft. lbs.
2" plug in fill port cap torque to 12 ft. lbs.
Fill port cap and plug must have gaskets to seal properly

Schütz (Manufacturer)

6" and 9" fill port caps torque to 75 ft. lbs.
2" plug in fill port cap torque to 15 ft. lbs.
Fill port cap and plug must have gaskets to seal properly

Greif (Manufacturer)

6" and 9" fill port caps tightened ½ turn after gasket makes contact with top of bottle and torque to a minimum of 45 ft. lbs.
2" plug in fill port cap torque to 20 ft. lbs. and for a ¾" plug to 9 ft. lbs.

NOTE: Manufacturers do not recommend filling the IBC through the 2" plug located in the fill port. Filling should be done through the 6" or 9" fill port.

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III. METAL DRUMS (UN)

OPEN HEAD DRUMS LID AND LOCK RING CLOSURE

1. Place cover on drum, using only the cover gasket supplied.
2. Snap the closing ring over the cover and lip of the drum. Make sure the ring's lugs point down, toward the floor. Ensure that sufficient downward pressure is applied to the cover so that the bottom edge of the closing ring is fully engaged under the bottom edge of the drum lip.
3. If there are fittings in the cover, the ¾" plug should be oriented between 45 to 90 degrees from the ring lug. If no ¾" plug, orient the 2" plug 45 to 90 degrees from the ring lug.
4. Insert the bolt through the unthreaded lug. If a jam nut is provided, screw jam nut on bolt. Finally, screw the bolt into the threaded lug.
5. Tighten the bolt in the locking ring lugs, to 60 ft. lbs. of torque. While tightening the bolt, tap the entire perimeter of the locking ring with a mallet until there is no further loosening. Begin each tapping cycle 180° across the drum head from the locking ring lugs; repeat several times. Check to ensure that the ring is seated tightly against the bottom edge of the drum lip and cover. For successful closure, the ends of the ring cannot touch each other after following the closure procedure.
7. If jam nut is provided, finger tighten jam nut against threaded lug of ring (metal to metal); then wrench tighten the jam nut an additional 14 to 28 degrees.
8. **Note:** If Fas-lok bolt or shoulder bolt is provided, they do not require a jam nut for proper closure.

BUNG CLOSURE

TO PROPERLY CLOSE ALL PLUGS IN THE DRUM:

1. Use only the plugs and gaskets supplied with the drum.
2. Tighten **all** plugs into their appropriate threaded flanges until snug.
3. Using a torque wrench, tighten each fitting to the correct torque indicated below.

| SIZE & FITTING STYLE | REQUIRED TORQUE | | | | |
|----------------------|--------------------|-------------|-------------|---------------------|-------------|
| | STEEL PLUGS | | | NYLON OR POLY PLUGS | |
| | Buna Rubber Gasket | Poly Gasket | EPT Gasket | Buna Rubber Gasket | Poly Gasket |
| 2" Rieke Type | 30 ft. lbs. | 40 ft. lbs. | 30 ft. lbs. | 20 ft. lbs. | 20 ft. lbs. |
| 1 ½" Rieke Type | 30 ft. lbs. | 40 ft. lbs. | 30 ft. lbs. | 30 ft. lbs. | 40 ft. lbs. |
| ¾" Rieke Type | 15 ft. lbs. | 20 ft. lbs. | 15 ft. lbs. | 9 ft. lbs. | 9 ft. lbs. |
| 2" Trisure Type | 20 ft. lbs. | 30 ft. lbs. | 20 ft. lbs. | 20 ft. lbs. | 30 ft. lbs. |
| ¾" Trisure Type | 12 ft. lbs. | 20 ft. lbs. | 12 ft. lbs. | 8 ft. lbs. | 8 ft. lbs. |
| | REQUIRED TORQUE | | | | |
| 2" Leak Lock | 25 ft-lbs. | | | | |
| ¾" Leak Lock | 20 ft-lbs. | | | | |