

CLOSURE NOTIFICATION ADVICE STEEL DRUMS

Pursuant to the requirements of the U.S. Department of Transportation at 49 CFR 178.2(c)(1), we hereby provide notification of the closing method used for the containers sold to you. This method of closure should be used to ensure that your containers have been closed in the same manner as when they were initially tested. Under the applicable DOT regulations, any changes made to (a) the type, materials or dimensions of closures or (b) the method of closure may constitute a change to the design type of these containers, voiding the UN certification we have marked on them.

TO CLOSE FITTINGS IN HEADS OR COVERS:

1. Insert and tighten all plugs into their appropriate threaded flanges until snug.
2. Using a torque wrench, tighten each fitting to the correct torque. See below for correct torques.
Torques are based on the closure manufacturers' recommendations.

SIZE & FITTING STYLE	REQUIRED TORQUE			
	STEEL PLUGS		NYLON OR POLY PLUGS	
	Buna Rubber Gasket	Poly Gasket	Buna Rubber Gasket	Poly Gasket
2" Rieke Type	30 ft. lbs.	40 ft. lbs.	20 ft. lbs.	20 ft. lbs.
3/4" Rieke Type	15 ft. lbs.	20 ft. lbs.	9 ft. lbs.	9 ft. lbs.
2" Trisure Type	20 ft. lbs.	30 ft. lbs.	20 ft. lbs.	30 ft. lbs.
3/4" Trisure Type	12 ft. lbs.	20 ft. lbs.	8 ft. lbs.	8 ft. lbs.

TO CLOSE OPEN HEAD DRUMS:

1. Place cover on drum, using only the cover gasket we have supplied.
2. Snap the closing ring over the cover and the bead of the drum. Make sure the ring's lugs point down, toward the floor. Also make sure 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 bead.
3. Insert the bolt through the lug without threads. If your specifications included lock nuts, screw on the lock nut. Finally, screw the bolt into the threaded lug.
4. Tighten the bolt in the locking ring lugs to 65ft lbs. of torque. While tightening the bolt, pound the entire perimeter of the locking ring with either a non-sparking brass/beryllium or rawhide mallet until there is no further ring movement. Do not rely on wrench tightening to bring closure without pounding ring as stripping of nut and/or lug will occur. Begin each pounding cycle 180° across the drum head from the locking ring lugs. Check to ensure that the ring is seated tightly against the bottom edge of the drum bead and cover. Note: for UN drums which do not utilize a 12-gauge bolt-ring, tighten bolt to 10ft lbs. while pounding ring to minimize lug deformation. Bottom of ring should be snug against drum body.
5. If your specifications included lock nuts, the lock nut must be tightened against the threaded lug of the bolt ring. Tighten lock nut to 25-30 ft. lbs. of torque. We advise all customers to recheck the torque on all fittings and bolts before your full container of product leaves your facility. Drums closed in the above manner meet the UN Performance Oriented Packaging Standards test requirement for the container markings shown on the drum.

Plastic Drum Closing Instructions

PLASTIC REMOVABLE HEAD DRUMS

We Recommend that these procedures be observed for all Regulated and Non Regulated Materials.

1. All removable head, UN 1H2, Plastic Drums, 49 CFR § 178.509(a)(2), of nominal capacity 20 to 60 U.S. gallons supplied with plastic lids, gaskets and associated clamp bands, or locking rings, must be closed for shipment using only the components supplied and specified in the design qualification tests according to the following installation instructions:
 - a. Place drum lid with gasket as supplied on the top opening of the drum body.
 - b. Firmly place lid onto top opening by applying downward pressure to lid above drum side wall and observe that drum chime is under gasket area.
 - c. Place locking band over cover and drum chime without dislocating proper cover drum interface.
 - d. While pressing down on lid, engage locking mechanism of clamp band to secure the lid in place. Make sure the locking mechanism is completely latched and the cover is uniformly covered by the band.
 - e. Engage or install latch or T clip to insure lever remains locked.
 - f. If covers are supplied with openings check closures are tight by making contact between the cover and the plug sealing surface and tighten an additional quarter turn to compress gasket or sealing surface.

PLASTIC NON-REMOVABLE HEAD DRUMS

1. All non-removable head, UN 1H1, Plastic Drums, 49 CFR § 178.509(a)(1), 15 gallon to 85 gallon nominal capacity supplied with plug or screw cap closures with gaskets must be closed for shipment using only the closures and gaskets supplied and specified in the design qualification test for the drum as indicated below:
 - a. 2-inch buttress and NPS versions of parts must be installed in the corresponding drum opening (bung) of corresponding size and thread pattern and tightened to 25 ft.-lbs. torque as recommended by the manufacturer.

INTERMEDIATE BULK CONTAINERS

1. All UN Intermediate bulk containers of nominal capacity 220 to 330 U.S. supplied with plastic caps (either 6" or 9" in diameter) must be closed for shipment using only the components supplied and specified in the design qualification tests according to the following installation instructions:

- a. Place IBC cap with gasket as supplied on the top opening of the IBC body.
- b. Firmly place cap onto top opening and turn the cap clockwise to engage the threads.
- c. Torque the cap to a minimum of 50 foot lbs.