

## *Mitchell Container Services, Inc. - Closure Instructions*

**In regulation 49 CFR 178.2C, the Department of Transportation (DOT) requires container manufactures and reconditioners to inform their customers of how to properly close container fittings and closure rings in order to return drums to their UN marking performance levels after filling.**

**Steel Tight Drums (Part Numbers Beginning with SDTH)** – Be sure all Plugs (Bungs) have new buna gaskets installed. 2” Hex-Type Plugs (Bungs) 30 Foot Pounds, ¾” Hex-Type Plugs (Bungs) 15 Foot Pounds, 2” Round-Style Plugs (Bungs) 20 Foot Pounds, ¾” Round-Style Plugs (Bungs) 12 Foot Pounds

**Steel Open-Head Drums (Part Numbers Beginning with SDOH)** – Be sure all Plugs (Bungs) have new buna gaskets installed. 2” Hex-Type Plugs (Bungs) 30 Foot Pounds, ¾” Hex-Type Plugs (Bungs) 15 Foot Pounds, 2” Round-Style Plugs (Bungs) 20 Foot Pounds, ¾” Round-Style Plugs (Bungs) 12 Foot Pounds. Removable Head Attachment Procedures – Close drums for shipment by placing ring around drum head and curl (Chime). Compress gasket between the body curl and cover by pressing downward on the drum cover or by tapping the ring with a mallet while torquing bolt. Use only rings, covers, and gaskets supplied with drums. Proper closure is attained when the ring closure gap is not exceeded and torque on the bolt closure is 60 foot pounds. Proper ring closure gap is ¼” plus or minus 1/8” after torturing bolt. Lock nut is to be tightened toward bolt head between lugs.

**Plastic (Poly) Tight-Head Drums (Part Numbers Beginning with PDTH)** – Be sure all Plugs (Bungs) have new buna gaskets installed. Tighten 2” NPT Thread Plugs (Bungs) to 20 Foot pounds, tighten ¾” NPT Thread Plugs (Bungs) to 9 foot pounds, tighten 2” Buttress Thread Plugs(Bungs) to 20 foot pounds, tighten ¾” Buttress Thread Plugs (Bungs) to 9 foot pounds.

**Plastic (Poly) Open-Head Drums (Part Numbers Beginning with PDOH)** – Torque requirements for Plastic (Poly) Bungs 2” buttress thread 2” 30 foot pounds and the ¾” is 9 foot pounds. Torque requirements for Plastic (Poly) Bungs 2” NPT 30 foot pounds and the ¾” is 9 foot pounds. Note: All bungs must have gaskets to seal properly. Closure Rings and Covers: Close drum for shipment by placing ring around drum head and lip. Compress gasket between drum body lip and cover by pressing downward on the drum cover or by tapping the ring with a mallet while tightening the bolt. Use only rings, covers, and gaskets supplied with drums. Lever Lock Style Ring: To ensure components meet performance requirements, ring is installed right side up when the locking tab closes in a down position. Be sure locking tab is secured through slot in ring handle. Bolt Style Ring: To ensure proper closure, do not exceed ring gap closure of ¼” (Give or take 1/8”) after torquing.

**Intermediate Bulk Containers (IBCs) (Part Numbers Beginning with LLSC)** – Plastic Plugs (Bungs) should be torqued to the following: 2” NPT and 2” Buttress 30 foot pounds, ¾” NPT 9 foot pounds. Note: Closures must have gaskets to seal properly. Be sure fill port cap and valve are torqued to the following: 6” & 9” fill port cap 55 foot pounds, valve nut 55 foot pounds. Note fill cap and valve nut must have gaskets to seal.

**Stainless Steel Intermediate Bulk Containers (IBCs) (Part Numbers Beginning with SICM)** – Lid installation procedure: All openings must be securely tightened to prevent leakage of materials and vapors. Each UN31A labeled tank is equipped with an emergency vent in the container lid which fits on the top opening. This vent must be inspected before each shipment, and must be replaced if faulty. The container lid and gasket must be inspected for damage and replaced if necessary. The container lid is installed on the top opening with a clamp ring. It may be necessary to tap the clamp ring, all around, with a non-sparking mallet. The non-sparking mallet should be used to strike in a horizontal position (Towards the side of the clamp ring) first starting at the twelve o’clock position, then three o’clock, then nine o’clock, then five o’clock, and then seven o’clock. Using this procedure you make the bolt pull the clamp ring uniformly all around the entire clamp ring creating a uniform clamping pressure on the gasket and lid. If the mallet is not used the clamp ring only gets tight on the side where the bolt and nut is located. After tightening the bolt to a torque of 30 foot pounds the lock nut must be firmly tightened into place. The 2” plug (Bung) and the 3” fill cap both require a gasket to seal and 30 foot pounds of torque for proper sealing.

**Snyder All Plastic (Poly) Intermediate Bulk Containers (IBCs) (Part Numbers Beginning with RPSN)** – The center fill cap and bung locations on Snyder Industries IBCs should be tightened according to the following guidelines: 6 ½” Gem Cap; The Gem Cap or fill cap should be tightened to 1/8” past the gasket contact but not to exceed 80 foot pounds of torque. Do not tighten further than 1/6 past gasket contact. Rieke Plugs (Bungs) with NPS threads require a gasket and 25 foot pounds to seal. Rieke Plugs (Bungs) with Buttress Threads require a gasket and 25 foot pounds of torque.

***Under the applicable DOT regulations, any changes made to the type and dimensions of closures or method of closure may constitute a change to the design type of this package, voiding the certification that is marked on it and requiring retesting and recertification.***

***After filling and prior to transport, the shipper should check the tightness of closures to determine if the effects of heating, cooling or gasket relaxation have resulted in the need to tighten the closure.***