

2/14/2008

KITZINGER COOPERAGE CORP.

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DRUM CLOSURE NOTIFICATIONS

Kitzinger Cooperage Corp., in accordance to the requirements stated in the code of Federal Regulations 178.2 (c) (1) provides closure notification of all containers bearing U.N. Certification. If after receiving our drums you as the filler and most likely the next shipper alter the drums in any way, you release Kitzinger Cooperage Corporation from its responsibilities as the drum manufacturer.

To comply with part 178.2 and to assist the shipper (our customer), we have listed the pertinent information which will enable you (the shipper) to fulfill your responsibility under part 173.22. You are required to provide closing information to any person to whom this package is transferred who may need to close the package prior to reshipment.

STEEL OPEN HEAD DRUM (UN1A2)

All open head type drums (UN1A2) that are supplied with locking rings, bolts, gaskets and lids must be closed for shipment using only the components supplied and specified in the design qualification test for that drum.

Closure Procedures

1. Place lid with gasket in place on top of drum curl.
2. Place ring around drum curl and lid, apply downward pressure to allow ring to capture lid and drum curl and compress gasket. If a cover with bungs is used the gap in the ring should be in line with the center of the bungs.
3. For 5/8 bolt ring, insert bolt through the unthreaded lug and install on the locking nut (if applicable). Then screw the bolt into the threaded lug. For 5/8 bolt that have 2 unthreaded lugs insert the bolt through both lugs and then install the locking nut. For 3/8 bolt and 5/16 bolts, insert the bolt through the unthreaded lugs. Place a washer then the proper locking nut and start to tighten.
4. Tighten the bolt while tapping around the entire perimeter of the ring with a rubber mallet. The bottom of the closing ring must tighten under the top curl of the body and top of the lid when fully assembled.
5. Tighten 12 gauge bolt ring with 5/8" bolts to 60 – 80 ft lbs. When properly assembled the gap between the ends of the ring should be as close as possible not to exceed 1/4". Tighten 14 or 16 gauge bolt rings with 5/16 bolt or 3/8 bolt to 12 – 15 ft lbs. When fully assembled, the gap between the free ends of the ring should not exceed 1/4" and should not touch.
6. For 5/8 bolts tighten the locking nut against the unthreaded lug to prevent the bolt from backing out of the closing ring.
7. If using a lever type lock ring, slowly close the lever while using a mallet to assist in closing. Engage latch to lock lever in place.

PLASTIC OPEN HEAD DRUM (UN1H2)

Covers and rings must match drum style and not be interchanged with different manufacturer's styles. Cover gaskets must be inspected for defects, and all bungs in lid must be tightened to proper torque

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specifications. Then follow proper closure specifications as listed.

STEEL CLOSED HEAD DRUMS (UN1A1)

Inspect all bungs which have been removed to ensure gaskets are in place. Insert bung by hand then continue tightening in accordance to proper specifications.

PLASTIC CLOSED HEAD DRUMS (UN1H1)

Same as above (UN1A1)

INTERMEDIATE BULK CONTAINERS

For Composites and Rigid type IBC's – 6" top cover should be torqued to 45 ft lbs. and all smaller openings need to be torqued to proper specifications.

For Stainless and Carbon steel IBC's – top lid gasket must be inspected for defects if removed after reconditioning and recertification. To reseal lid follow closure procedure for 1A2 open head drums.

Kitzinger Corp. does not ship containers to customers with closures secured to compliance specifications. It is the filler of the containers responsibility to ensure the container is in UN Compliance before shipping. If there are any questions regarding proper closing methods please contact Kitzinger Corp.

REQUIRED TORQUE SPECIFICATIONS

SIZE & FITTING STYLE	STEEL PLUGS		NYLON OR POLY PLUGS	
	Buna Gasket	Poly Gasket	Buna 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.	20 ft. lbs.
3/4" Trisure Type	12 ft. lbs.	20 ft. lbs.	8 ft. lbs.	8 ft. lbs.

Use only the plugs and gaskets we have supplied with the drums. Insert and tighten all plugs into their appropriate threaded flanges until snug. Using a torque wrench, tighten each fitting to the correct torque. Torque is based on the closure manufacturers' recommendations. Drums closed in this manner meet the UN performance oriented packaging standards test requirements for the container markings shipped. ***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.

Please contact Kitzinger Cooperage Corp. with any questions regarding these closure requirements.
Revised March 20, 2007 by Kitzinger Cooperage Corp.

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