



CLOSING INSTRUCTIONS – FIBER DRUMS (1G)

Mauser Packaging Solutions (MPS) provides these instructions to the filler of UN certified fiber drums. A QR code link to this document is included on the Bill of Lading for all drum shipments from MPS. You can also access the document directly at: <https://mauserpackaging.com/closing-instructions>.

This document applies to drums produced at the following manufacturing locations

M6063- 903 N.Kilpatrick Avenue, Chicago IL 60651
M6731-7 McFadden Road, Easton, PA 18045
M6064-701A Lawton Road, Charlotte, NC 28216

United States Department of Transportation regulations state that packaging manufacturers are required to notify each person to whom the packaging is transferred of all requirements not met at the time of transfer. This requirement is given in Title 49, Code of Federal Regulations (49 CFR), Part 178 Specifications for Packagings, § 178.2 (c). In addition, this Paragraph requires the closing information to be provided to any person to whom this package is transferred who may need to close the packaging prior to re-shipment. Furthermore, it is the shipper's responsibility as set forth in §173.22(a)(4) to ensure that these closing instructions are carried out as described. In order to ensure the instructions are followed in a manner to result in safe transport of hazardous materials the shipper is obligated, as set forth in § 172.704(a)(4), namely - function specific training - to train his/her employees in the correct way to close the packaging for shipment.

These closing instructions must be given to the individuals responsible for closing the packagings prior to shipment. Many companies use electronic copies as site specific work instructions and/or use laminated hard copies posted at the fill lines for reference by the fill line operators. A hard copy (printed) must be maintained by the filler or offeror for shipment.

MPS recommends that only parts that have been tested and certified by MPS be used to close the packagings for shipment. Any UN marking is voided if parts or components other than those as sold with or specified by the original packaging design are used. In the case of removable head drums, the lids, gaskets and locking rings are supplied as tested.

PRIOR TO CLOSING:

Inspect each lid to ensure that the lid has the proper gasket (if applicable) and that both lid and gasket (if applicable) are in good condition. Inspect the sealing surface on the drum for damage and make sure the sealing surface is dry. Replace any defective lids or gaskets (if applicable) with new, defect free parts identical to those listed in the design qualification and periodic recertification tests.

FIBER REMOVABLE HEAD DRUMS

All removable head, UN 1G, Fiber Drums, 49 CFR § 178.508(a), supplied with plastic lids, or fiber lids, or metal lids, gaskets (if applicable) and associated locking rings, must be closed for shipment using only the components specified in the design qualification and periodic recertification tests according to the following installation instructions:

- For fiber drums with poly bags:
 - Insert poly bag into drum. Specialty heavy duty and/or antistatic bags and the use of multiple bags will be noted in like manner in the product code and certification documentation.
 - Fill contents and close bag or bags with wire tie or plastic cable (zip) tie.
- For all fiber drums, place drum lid with gasket (if applicable) and selected locking ring as supplied on the top opening of the drum body.
 - Place locking ring tab up for top latch style rings & tab down for bottom latch style rings.
- Firmly place lid onto top opening by applying downward pressure to lid above drum sidewall.

- While pressing down on lid, engage locking mechanism of locking ring to secure the lid in place. Make sure the locking mechanism is completely latched. Insert locking tab into slots in locking ring handle.

Items 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:

	Part Size/Description	Closure torque
A	2-inch NPS/NPT solid and vented: EPDM; Buna; FKM ¹ ; Silicone	20 ft-lbs
B	3/4-inch NPS/NPT solid and vented: EPDM; Silicone; FKM	6 ft-lbs

¹ FKM, FPM and Viton are names for the same base material: fluoro rubber.

TORQUE WRENCHES

The following are photographs of various torque wrenches MPS has found suitable to apply the required closing torque. These are typical units and other brands of adjustable wrenches are acceptable. These should be regularly calibrated.



Dial Indicating and Adjustable Torque Wrench



Husky Brand Indicating Wrench



Preset Wrenches

Revision history:

Version	Description	Prepared by	Effective Date
MC/PAS-QA-104 REV 03	- Add closure torque specification for drums supplied with plugs, screw caps and gaskets - Add examples of torque wrenches - Remove nominal drum capacity. Closing instructions apply to UN rated drums of all sizes - Formatting changes throughout document - Update for the end user how to access closing instructions	D.Stanbro/T.Smoleeva	09/08/2025