M&M INDUSTRIES, INC.

MANUFACTURER'S NOTIFICATION FOR M & M INDUSTRIES, INC. UN/DOT PACKAGING FOR HAZARDOUS SOLIDS/LIQUIDS

At M&M Industries, we understand your goal to safely transport your valuable products along roads and highways. You want to provide your customers with value while keeping their trust. While we are legally bound to provide you with the following information, M&M Industries also wants you to know we value your endeavor and want to help you reach your goal, every day.

Under the **U.S. Department of Transportation's Title 49CFR** it is the **Shipper's Responsibility** to determine that the packaging or container is an authorized packaging, including all part 173 requirements. The selected packaging must be properly assembled for transportation in accordance with the manufacturer's notification. Please do all testing and research necessary to ensure that you have selected the proper M & M Industries container for use with your product.

To meet UN/DOT Standards, this package must be properly closed for shipment. At the time of transfer, the packaging does not meet the UN standard because it is disassembled. Only when assembled as specified in the closure instructions below, and using the components described herein, is this packaging certified to meet the UN standard. Failure to follow the closure instructions or substituting package components with components other than those identified in the following paragraph will render the UN/DOT Certification invalid.

A copy of the manufacturer's notification, including closure instructions, must be made available for inspection by a representative of the Department of Transportation upon request for at least 90 days once the package is offered to the initial carrier for transportation in commerce, as of this time (June 2013). However, M&M Industries recommends that you retain these documents for a minimum of 365 days after the package is offered for shipment. The current record retention requirements are subject to change and are found in 49CFR 173.22(a)(4), http://www.ecfr.gov

M&M Industries takes superb pride in our Quality Assurance program and systems. However, even with our very best efforts, fittings on covers/pails can become damaged or shift during transportation or storage after leaving our facility. M&M Industries recommends that fillers/offerors take all steps deemed necessary to check the fittings on each pail/cover, to meet your quality standards. An example of this is a screw cap on a cover that may vibrate or back off during transportation. The offeror of a hazardous material may be open to liability if they do not take the necessary precautions. Should you have any questions, please contact customer service at **(800) 331-5305**.

THESE CLOSURE INSTRUCTIONS REMAIN IN EFFECT UNTIL FURTHER NOTICE.

CLOSURE INSTRUCTIONS FOR: M2/M2 (tear tab lid) and M2/M4 (non-tear tab lid) Containers

Identification of Packaging:

This packaging type is identified by:

Pail Size (gallons)	Mold Number	M2 Lids (B engraved on lid, tear tab)	M2 Lid diameter (ref only, measured at bottom of lid)	M4 Lids (A engraved on lid)	M4 Lid diameter (ref only, measured at bottom of lid)
6.5	11716	10905, 10953, 11183, 11184, 11827, 12680	12.477″	N/A	N/A
0.5	11/10		12.477		N/A
5.5	10910, 11851	10950, 10953, 11183, 11184, 11827, 12680	12.477"	10909, 11096	12.43"
5.3	12341	10950, 10953, 11183, 11184, 11827, 12680	12.477"	10909, 11096	12.43"
5.0	10948, 11181, 11182, 12342	10950, 10953, 11183, 11184, 11827, 12680	12.477"	10909, 11096	12.43"
3.5	11100	10950, 10953, 11183, 11184, 11827, 12680	12.477"	N/A	N/A
2.0	11251, 11849	11250, 11850	9.955"	N/A	N/A

Lid Description	Gasket Material	Available fittings
M2 (B engraving)	EPDM	Rieke Metal Spout FS-10-10-231
		Rieke Plastic Spout FS-16AP
Tear tab lid		Rieke Plastic Screw Cap FS-80
		Vent Cap with Vent Spout (M2 Only) PV-20-52 and FS-16AP-TFE
		Rieke Tint Plug (M2 Only) TFS-2P
M4 (A engraving)	EPDM	Rieke Metal Spout FS-10-10-231
Liquids		Rieke Plastic Spout FS-16AP
Non-tear tab lid		Rieke Plastic Vented Spout FS-16AP-TFE
		Rieke Plastic Screw Cap FS-80
		Rieke Plastic Vented Screw Cap FS-80-PV-TFE-1

UN Markings for M2/M2 (tear tab lid) and M2/M4 (non-tear tab lid) Containers:

Pail Size			Certified for
	UN Mark	1:4	Certified for
(gallons)	UN Wark	Lid	
6.5	1H2/Y27/S	M2	Solids only
5.5	1H2/Y25/S	M2	Solids only
5.3	1H2/Y25/S	M2	Solids only
5.0	1H2/Y25/S	M2	Solids only
	1H2/Y40/S		
5.5	1H2/Y1.5/20	M4	Solids and liquids
	1H2/Y40/S		
5.3	1H2/Y1.5/20	M4	Solids and liquids
	1H2/Y40/S		
5.0	1H2/Y1.5/20	M4	Solids and liquids
3.5	1H2/Y21/S	M2	Solids only
2.0	1H2/Y9/S	M2	Solids only

An appropriate UN marking must be maintained for each M&M Industries container design. The UN markings for M&M Industries M2/M2 (tear tab lid) and M2/M4 (non-tear tab lid) containers are listed below.

In accordance with the U.S. Department of Transportation's Title 49CFR, Section 178.2, manufacturers of U.N. Standard/DOT Specification packages are required to notify in writing each person to whom that packaging is transferred of all requirements in this part not met at the time of transfer, and with information specifying the type(s) and dimensions of the closures, including gaskets and any other components needed to ensure that the packaging is capable of successfully passing the applicable performance tests. This information must include any procedures to be followed, including closure instructions for inner packagings and receptacles, to effectively assemble and close the packaging for the purpose of preventing leakage in transportation.

Specifically, the following items pertain to the M2/M2 (tear tab lid) and M2/M4 (non-tear tab lid) containers:

- 1. M2/M2 (tear tab lid) and M2/M4 (non-tear tab lid) containers are certified to the UN/DOT performance oriented packaging standards and are marked with the appropriate UN markings on the container.
- 2. The M2 pail must always be used with the correct M2 or M4 lid in order to meet the UN/DOT performance oriented packaging standards.

M2/M2 and M2/M4 pails

- 3. ONLY the 5 through 5.5 gallon M2 pails with M4 lids are UN certified for liquid hazardous materials, and only for ground or vessel transportation.
- 4. M2/M2 (tear tab lid) and M2/M4 (non-tear tab lid) containers are **NOT** UN certified for air transportation of liquids.

A. CLOSURE INSTRUCTIONS FOR THE M2/M2 and M2/M4 PAIL AND LIDS:

- 1. Pneumatic press with six" cylinder 5-5.5 gallon sizes ONLY (Figure A),
 - a. Adjust downward stroke of top plate so that it goes beyond pail rim by 1/16-1/8"
 - b. Center the pail and lid under the press.
 - c. Apply a minimum of 80 psi from a regulated air supply to the lid listening for a defining snap.
 - d. Inspect lid after application to confirm it is properly seated.



Figure A: Pneumatic Press

- 2. Rubber mallet (minimum 16 oz,) all sizes 2 gallon through 5.5 gallon
 - a. Centerthelidonthepail.
 - b. Hammer the cover into place by striking cover in the center of the cover's outer ring (Figure B).
 - c. Strike cover until it snaps onto the rim of the pail. For best results, strike cover starting at 12 o'clock position, then 6 o'clock, then 3 o'clock and 9 o'clock. Continue to hammer the cover into place 360 degrees, until the cover is evenly seated all the way around the pail.
 - d. Inspect lid after application to confirm it is properly seated.

Figure B



M2/M2 and M2/M4 pails

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Properly seated M2 lid:



Properly seated M4 lid:



Improperly seated M2 lid:



Improperly seated M4 lid:



- 3. When using the cover with the screw cap fitting, the recommended application torque for the 70mm cap is 120 inch pounds. Use a calibrated torque wrench to apply the closure to the fitting.
- 4. If Rieke pail spout is supplied separately, refer to spout installation instructions below.

B. CLOSURE INSTRUCTIONS FOR RIEKE SPOUT (if not pre-applied):

- **1.** Use a Rieke spout installer only.
- 2. Place lid into installer in the upright position (if applicable).
- 3. Place Rieke plastic spout in spout hole of lid in upright position.
 - a. For automated crimper: Place right and left index fingers on each side of the spout installer to activate.
 - b. For Hand crimper: Apply per Rieke crimping tool instructions.



See instructions on next page to confirm proper application of spout.

Revision History:

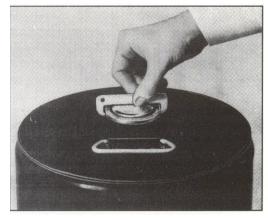
Original issue - August 19, 2013 Revision 1 – January 12, 2015 – separated pneumatic press for 5-5.5 gallon sizes only Revision 2 – December 1, 2015 – added cylinder size to pneumatic press, stroke adjustment and mallet size



This gauge is to be used to check FLEXSPOUT® Closure installations made by the following model tools: FS, Hand Operated Tool; IAFS Airmatic Tools. This gauge is to be used when gaging both steel and plastic pails.

How To Use The Flexspout Closure Slip Gauge

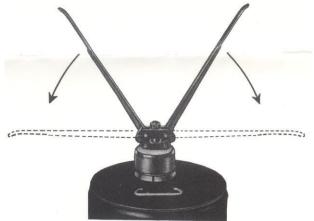
Place gauge in position shown. Inner lands on gauge should rest on top of Flex Ring. In this position the gauge should clear freely the side wall of the installed FLEXSPOUT Closure when drawn across.



SHOULD THE GAUGE FAIL TO CLEAR the sides of the

FLEXSPOUT Closure after it has been crimped on by hand tool, one of the following is the reason:

1. The operator failed to properly bottom the handles:



2. The tool is not functioning properly and should be returned to Rieke for adjustment.

SHOULD THE GAUGE FAIL TO CLEAR the sides of the FLEXSPOUT Closure after it has been crimped by either type of mechanically operated tool, the tool or power unit is not functioning properly and should be returned to Rieke for repair and adjustment.

TIPS ON THE USE AND CARE OF YOUR FLEXSPOUT CLOSURE TOOLS

- Be sure your operator is instructed to bottom the tool each time he affixes a FLEXSPOUT Closure to a container. This merely requires him to move handles downward as far as they will go.
- Rest the tool evenly on the container head, over the FLEXSPOUT Closure before starting the downward movement of the handles. This prevents "cocking' of the tool which results in an inferior seal.
- Keep your tools well-oiled and keep the closing collets or jaws free of dirt and paint.
- Do not attempt to adjust or dismantle your tools. They are precision adjusted at the factory for maximum sealing efficiency and received by you ready to use. Should your slip gauge reveal inefficient performance of any tool, return the tool to Rieke; transportation charges prepaid, for adjustment or repair.
- Do not remove miscrimped FLEXSPOUTS with the crimping tool. This will cause damage to the crimping tool by "popping out" or chipping the jaws. The M-066 removal tool should be used.



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