



***CLOSURE INSTRUCTIONS***

***TIGHTHEAD DRUMS (1H1)***

***TIGHTHEAD JERRICANS (3H1)***

The instructions provided herein are to be used with UN marked plastic open head pails that are in compliance with the US Department of Transportation's hazardous material regulations. This falls under the Title 49 Code of Federal Regulations, in accordance with subsection 178.2 (c).

It is the obligation of the filler to use and follow these closure instructions to ensure that the product meets required UN markings and performance. Only when assembled in the manner below are these packages certified to meet the UN marking provided.

**Package:**

1H1 tight head plastic drums – liquid UN rated 15.0 gallon (2" NPS x 2" buttress) and (2" NPS x ¾" NPS)

1H1 tight head plastic round drums – liquid UN rated

3.5 gallon to 7.0 gallon

3H1 tight head square and rectangular plastic jerricans – liquid UN rated

10 liter to 7.0 gallon

**Purpose:**

When following these instructions, the purpose of these closure instructions is to ensure that the UN container, with required fittings, are properly applied to the UN marked plastic drum or jerrican.

**Instructions:**

15.0 Gallon tight head drum with 2" NPS and 2" Buttress plugs (1H1) or 2" NPS and ¾" NPS plugs (1H1)

Inspect top of NPS opening to ensure the sealing surface is smooth, clean and free of debris

Inspect the 2" NPS fitting to ensure the gasket is installed properly and is not loose.

Inspect the 2" NPS fitting to ensure the fitting is clean and free of debris

Start installation of the 2" NPS fitting by hand, rotating the fitting in a clockwise direction. Ensure the fitting is being installed straight and does not cross-thread the drum threads. Continue to tighten as far as possible by hand.

Use a bung torque wrench to torque the 2" NPS fitting to 20 ft-lbs.

Make sure fitting tightens properly and does not strip or continue to tighten without getting tight

**Inspect top of buttress opening to ensure the sealing surface is smooth, clean and free of debris**

**Inspect the 2" buttress fitting to ensure the gasket is installed properly and is not loose.**

**Inspect the 2" buttress fitting to ensure the fitting is clean and free of debris**

**Start installation of the 2" buttress fitting by hand, rotating the fitting in a clockwise direction. Ensure the fitting is being installed straight and does not cross-thread the drum threads. Continue to tighten as far as possible by hand.**

**Use a bung torque wrench to torque the 2" buttress fitting to 20 ft-lbs.**

**Make sure fitting tightens properly and does not strip or continue to tighten without getting tight**

**Visually inspect drum after installation of fittings to ensure everything looks straight and clean**

*If installing ¾" NPS instead of 2" buttress fitting:*

**Inspect the ¾" NPS fitting to ensure the gasket is installed properly and is not loose.**

**Inspect the ¾" NPS fitting to ensure the fitting is clean and free of debris**

**Start installation of the ¾" NPS fitting by hand, rotating the fitting in a clockwise direction. Ensure the fitting is being installed straight and does not cross-thread the drum threads. Continue to tighten as far as possible by hand.**

**Use a bung torque wrench to torque the ¾" NPS fitting to 10 ft-lbs.**

**Make sure fitting tightens properly and does not strip or continue to tighten without getting tight**

**Visually inspect drum after installation of fittings to ensure everything looks straight and clean**

### **3.5 – 7.0 Gallon round tight head drums with 70 mm Tamper-evident screw caps and 22 mm vent caps (1H1)**

**Inspect top of drum opening to ensure the sealing surface is smooth, clean and free of debris**

**Inspect the 70 mm screw cap fitting to ensure the gasket is installed properly and is not loose.**

**Inspect the 70 mm screw cap fitting to ensure the fitting is clean and free of debris**

**Start installation of the 70 mm screw cap fitting by hand, rotating the fitting in a clockwise direction. Ensure the fitting is being installed straight and does not cross-thread the drum threads. Continue to tighten as far as possible by hand.**

**Use a screw cap torque wrench to torque the 70 mm fitting to 25 ft-lbs.**

**Make sure fitting tightens properly and does not strip or continue to tighten without getting tight**

**Inspect 22 mm vent cap to ensure it is free from debris**

**Start installation of 22 mm vent cap fitting by hand, rotating the fitting in a clockwise direction. Ensure the fitting is being installed straight and does not cross-thread the vent threads. Continue to tighten as far as possible by hand.**

**Use a vent cap torque wrench to torque to 22 mm fitting to 4.0 ft-lbs.**

**Visually inspect the container after fitting installation to ensure everything looks straight and clean.**

### **10 liter – 7.0 Gallon square and rectangular tight head containers with 70 mm Tamper-evident screw caps and 22 mm vent caps (3H1)**

**Inspect top of drum opening to ensure the sealing surface is smooth, clean and free of debris**

**Inspect the 70 mm screw cap fitting to ensure the gasket is installed properly and is not loose.**

**Inspect the 70 mm screw cap fitting to ensure the fitting is clean and free of debris**

**Start installation of the 70 mm screw cap fitting by hand, rotating the fitting in a clockwise direction. Ensure the fitting is being installed straight and does not cross-thread the drum threads. Continue to tighten as far as possible by hand.**

**Use a screw cap torque wrench to torque the 70 mm fitting to 25 ft-lbs.**

**Make sure fitting tightens properly and does not strip or continue to tighten without getting tight**

**Inspect 22 mm vent cap to ensure it is free from debris (Please note 10-liter jerrican does not contain a rear vent)**

**Start installation of 22 mm vent cap fitting by hand, rotating the fitting in a clockwise direction. Ensure the fitting is being installed straight and does not cross-thread the vent threads. Continue to tighten as far as possible by hand.**

**Use a vent cap torque wrench to torque to 22 mm fitting to 4.0 ft-lbs.**

**Visually inspect the container after fitting installation to ensure everything looks straight**

### **3.5 – 7.0 Gallon round tight head drums with crimp-on spout fittings (1H1)**

**Inspect top of container opening to ensure the sealing surface is smooth, clean and free of debris**

**Inspect the spout fitting to ensure the fitting is clean and free of debris**

**Start installation of the spout fitting by hand, snapping the spout over the flange of the container. Ensure the fitting is being installed straight and alignment is square.**

**Use a crimp-on wrench as supplied by the spout manufacturer.**

**Pull both levers of the flange installation tool straight down and in a simultaneous motion to properly crimp the spout onto the container flange.**

**Inspect the crimp to ensure that the outer diameter of the spout fitting has securely crimped around the flange of the container. The crimp should look clean, flush and solid. There should be no movement of the spout flange if you try to rotate the spout by hand.**

**Inspect the crimped-on spout to ensure there is no gap between the spout outer diameter and the container flange.**

**Visually inspect the container after spout fitting installation to ensure everything looks straight and clean.**

### **3.5 – 7.0 Gallon square and rectangular tight head jerricans with spout fitting and no rear vent (3H1)**

**Inspect top of container opening to ensure the sealing surface is smooth, clean and free of debris**

**Inspect the spout fitting to ensure the fitting is clean and free of debris**

**Start installation of the spout fitting by hand, snapping the spout over the flange of the container. Ensure the fitting is being installed straight and alignment is square.**

**Use a crimp-on wrench as supplied by the spout manufacturer.**

**Pull both levers of the flange installation tool straight down and in a simultaneous motion to properly crimp the spout onto the container flange.**

**Inspect the crimped-on spout to ensure there is no gap between the spout outer diameter and the container flange.**

**Inspect the crimp to ensure that the outer diameter of the spout fitting has securely crimped around the flange of the container. The crimp should look clean, flush and solid. There should be no movement of the spout flange if you try to rotate the spout by hand.**

**Visually inspect the container after spout fitting installation to ensure everything looks straight and clean.**