

## Dispensing MICA Products from IBC Totes

This document is intended to review proper configurations and offer solutions for optimal dispensing of Mica Corporation products from IBC totes.

### The Tote

The totes are recyclable, 275-gallon (1,000 liter) bag-in-box intermediate bulk containers (IBC), supplied by Grayling. They have one 2" (5 cm) NPS female threaded fitting on the top, and one 2" (5 cm) buttress female threaded fitting on the lower side. The liner is a 3-ply polyethylene bladder, and the frame is a 4-ply corrugated cardboard box which sits on a heat-treated wooden pallet.

### Top Feed Dispensing

Based on customer experience, we have found that the most effective way to dispense from our tote is to pump from the top outlet. By pumping through the top, the risk of leaking is minimized, and the utility of the tote is maximized.

#### **Materials Needed:**

- Drum plug wrench
- Diaphragm pump\* (Figure 3)
- A 2" (5 cm) adapter with a hose barb (Figure 1)
- Screw or nut driver
- Air Compressor
- Receptacle to dispense into
- Personal Protective Equipment (Consult SDS)

#### **Instructions:**

1. Remove the cardboard and plastic coverings from the tote.
2. Use a drum plug wrench to loosen and remove the cap on the top outlet.
3. Connect the hose to the top dispensing port on the bladder of the tote by hand-tightening (Figure 2).
4. Connect the other end of the hose to the pump. We suggest using a positive displacement pump such as a diaphragm pump. Centrifugal pumps can cause the product to foam. To avoid contaminating the primer, be sure to use only plastic and stainless steel for wetted parts.

5. Using a screw or nut driver, tighten the hose clamp.
6. Connect compressed air to the pump.
7. Make sure the dispensing hose is directed into the receptacle of your choice and turn the pump on.



Figure 1



Figure 2



Figure 3

*\*Mica Corporation can provide a Mica Tote Top Dispensing System, which includes a diaphragm pump, dispensing hose, feed hose, and adapter for a fee.*

## Bottom Feed Dispensing

Bottom dispensing can be achieved through the use of a special valve and piercing device provided by Mica Corporation (Figure 4). We have determined that these valves cause some difficulty in making a leak-free connection. Please follow the instructions carefully to maximize efficiency.



Figure 4

### **Materials Needed:**

- Drum plug wrench
- Valve with a piercing device†
- Receptacle to dispense product into
- Personal Protective Equipment (Consult SDS)

### ***Instructions:***

1. Using a drum plug wrench, loosen and remove the cap from the bottom outlet.
2. Inspect the valve adapter to be sure that the threads are clean and intact. Inspect the gasket for cleanliness and integrity.
3. Screw the valve into the bottom outlet carefully to avoid cross-threading. Once the gasket comes in contact with the threaded fitting, tighten the valve 1/8 a turn by hand. **Do not use tools to tighten the valve.**
4. Retract the piercer and open the valve by turning the yellow handle.
5. Screw the piercer hand tight into the valve.
6. Place a receptacle under the valve and piercer to catch drips that will occur when the piercer is removed.
7. Push the piercer through the valve and into the tote until it stops.
8. Pull the piercer back out.
9. **Close the valve.**
10. Unscrew the piercer with rubber-gloved hands, as some primer will leak out. The valve is now ready for use.

*\*Upon request, a valve and piercing device can be provided to Mica customers at no cost.*

## Contact Us

If you would like to order a Mica Tote Top Dispensing System, request a valve, replace any parts, or need further assistance, please contact your Mica Technical Sales Representative, or call us at (203) 922-8888.