

FisherPak Instructions

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FisherPak Installation and Start-up Procedures

Refer to the FisherPak schematic (shown on last page), to match parts, including clips, gauges, valves and valve numbers indicated in these instructions.

FisherPak Connection Procedures

1. Break the tamper-evident cable ties and remove the cover from the container.
2. Connect grounding clip (11) to the container at a hand or hook hole.
3. Check pressure gauge (18). The pressure should be between "0" and "15" PSIG. All containers are filled and sealed with a positive head of Nitrogen gas.

Note: Altitude and temperature combined with acceptable low level out gassing may result in "0" PSIG when you receive your container. The material is not compromised in this event.

4. Make certain that the regulator is shut off and that site valve (4), and container valves (15) & (20) are closed.
5. Remove the yellow cap from the rupture disk (17).

Note: The 19L FisherPak system does not have a yellow cap.

6. Connect the distribution hose (9) to liquid stem (21).
7. Set the gas pressure regulator to your desired operating level. (Max: 15 PSIG, recommend 7 PSIG)

Caution: Severely over pressurizing a FisherPak container will result in product vapors discharging through relief valve (3), then through rupture disk (17). You may wish to place an exhaust hose over these fixtures. Never alter any fixture on the dome of the container without express written directions from Fisher Chemical. Contact your Chemical Sales Representative or Customer Service if you have questions on this procedure.

Note: If at any time you wish to vent pressure from the container, open valve (4). The product fumes will also be released. Vent to a proper exhaust system for the product.

8. Open valve (15) to allow the inert gas into the container. The gauge on the CONTAINER should match the gauge on your gas supply.
9. Open valve (20) to allow product into your distribution line.
10. Open your system valve (12) to supply product to your application as desired.

CAUTION:

1. REMOVE YELLOW CAP BEFORE CONNECTING ANYTHING TO THE CONTAINER, AND RECAP WHEN SHIPPING BACK TO FISHER. (The 19L FisherPak system has a special rupture disk that does not require a cap when shipping.)
2. GROUND THE CONTAINER BEFORE CONNECTING IT TO ANYTHING.
3. OPERATE BELOW 15 PSIG (for standard FisherPaks).
4. For operating pressures above 15 PSIG, ask about our ASME-certified FisherPaks).

FisherPak Dip Tape Level Gauge Operating Instructions

Refer to the FisherPak schematic (shown on last page), to match parts, including clips, gauges, valves and valve numbers indicated in these instructions.

1. Hold the pull-tab of the dip tape.
2. Slowly raise the tape until you feel a slight tug.
3. Read the tape in liters or centimeters right where it clears the black plastic grommet. That measurement is how many liters or centimeters of material you have left. At 25°C, the 200L and the 115L containers hold about 2.5L/cm. They have an additional 6L of material when the tape reads "0". The 50L containers hold 1.25L/cm.

Examples:

200L Example: You read 46cm on your tape: $46\text{cm} \times 2.5\text{L/cm} = 115\text{L}$, add 6L = about 121L

50L Example: You read 20cm on your tape: $20\text{cm} \times 1.25\text{L/cm} = 25\text{L}$, add 6L = about 31L

4. Free the tape by pushing down sharply and allow the tape to recede into the black plastic grommet.

Trouble-shooting Guide

Refer to the FisherPak schematic (shown on last page), to match parts, including clips, gauges, valves and valve numbers indicated in these instructions.

Common checks to conduct for performance issues:

- Blown Rupture Disk – A rupture disk is a safety device that releases pressure if a keg or container is over-pressurized. It is possible to arrive to the customers' site with a blown disc. This likely occurs from a logistical standpoint where a pressure spike may cause the disc to blow. You will hear a hissing noise when the keg is pressurized and the disc is bad. Replacement disc and instructions can be sent out if desired or unit can be returned for repair.
- Faulty gauge – If the unit's gauge either reads "negative pressure" or indicates the keg is pressurized but the needle is not moving, the unit should be returned for repair.
- Handle is moving to the "on" position but solvent is not dispensing – Valve handles contain set screws (Hex bit). If the handle turns to the "on" position, but solvent is not dispensing, check to make sure the Hex screw is tight. It is unlikely but possible for these Hex screws to back out due to vibration from transportation.
- Proper pressure not achieved – Make sure that the gauge is reading pressure in the tank to ensure that the vessel has been properly pressurized. Make sure the Nitrogen tank is operating in a correct fashion.
- Material bubbles/sputters out – This could mean one of two things: (1) Either the drum is over- pressurized; or, (2) One of the seals has been compromised. To confirm the seals are working properly, turn the handles on the keg in the "off" position. Next, check the gauge for the current reading. Recheck the gauge in five minutes. If there is no change in pressure, allow another 15 minutes to pass. If there is still no pressure loss, the keg's seals are functioning properly.

To find answers and resolve any other issues, please contact your Fisher Chemical sales representative or customer service specialist.

FisherPak Disconnection Procedure

Refer to the FisherPak schematic (shown on last page), to match parts, including clips, gauges, valves and valve numbers indicated in these instructions.

1. Close valve (12) to your applications.
2. Shut off the regulator at your gas supply.
3. Close valves (15) and (20) on the container.
4. Return with 7-15 PSIG (Open valve (4) to vent the line, then close the valve.)

– IMPORTANT: NEVER SHIP THE CONTAINER WITH OVER 15 PSIG.

1. Disconnect the liquid hose from stem (21).
2. Disconnect the gas hose from stem (14).
3. Reapply the yellow cap to rupture disk (17) by hand TIGHTLY. (The 19L FisherPak system does not require a cap on the rupture disk for shipping.)
4. Disconnect the ground clip (11) from the container.
5. Reattach steel cover and fasten with cable ties.

Rupture Disk Replacement Procedure

Refer to the FisherPak schematic (shown on last page), to match parts, including clips, gauges, valves and valve numbers indicated in these instructions.

A rupture disk is a safety device that releases pressure if a keg or container is over-pressurized. In the unlikely event of an over-pressurization of the container causing the rupture disk to burst, call your Customer Service Representative, then follow these procedures to replace the burst disk.

1. Shut off the gas line to the container at the regulator.
2. Close valve (12), and valve (20).
3. Open valve (4), to exhaust.
4. Allow the container to vent until you are satisfied that the pressure has equalized (the gauge should read “0”).
5. Close valve (4).
6. Close valve (15).
7. Reapply the yellow cap until the replaced rupture disk is on hand. (For 19L FisherPak systems cover the rupture disk with appropriate film and store in a ventilated area until the new rupture disk arrives.)
8. Using a wrench, remove the blown rupture disk from the container. Save the lanyard and cap, if applicable.
9. Wrap the inlet threads of the new rupture disk with Teflon tape three layers thick. Keep the end-most two threads free of tape.
10. Use a wrench to tighten the disk into the container so that the engraved flow arrow points out and the lanyard (if applicable) is around the base.
11. Reconnect according to the connection procedure as noted previously.
12. Check seal by spraying a soap solution around the sealing area of the rupture disk and looking for bubbles. If bubbles appear, tighten the disk. If leak persists repeat steps 8-11 with more Teflon tape. (Up to 4 wraps).

Send the burst rupture disk to: Fisher Chemical, 1 Reagent Lane, Fair Lawn, NJ 07410
ATT: Fisher Pak Coordinator

We will then arrange for you to receive a new rupture disk by next-day shipment.

FisherPak Return Shipping Instructions

Refer to the FisherPak schematic (shown on last page), to match parts, including clips, gauges, valves and valve numbers indicated in these instructions.

1. Weigh the container and subtract the “tare weight” (engraved on the ID tag). Note the net weight on the pressure-sensitive label. Cut the label along the dotted line.
2. Place net stickers on the product labels so that they cover the “liters” in center.
3. Secure the tamper-indicating straps through any of the skirt holes.
4. Remove orange sticker to expose shipping destination label on the side of the container.
5. Ship container upright, secured to a pallet.

Unless cleaned and purged of all hazardous vapors and residue, the container must be prepared by a trained and certified person in accordance with 49CFR Hazardous Materials Regulation, Parts 105-180.

In summary, the shipper MUST:

- Properly classify the material.
- Accurately describe the material.
- Assemble and seal the package in accordance with the required specifications.
- Mark the package.
- Label the package.
- Provide shipping papers, which accurately describe the material. The shipping papers must include:
 - The shipper's and consignee's names, addresses and contact information.
 - An accurate description of the hazardous material (i.e., UN ID #, proper shipping name (including the n.o.s.); plus, if applicable, Hazard Class/Division along with any subsidiary hazard classes; and Packing Group. The shipper may also need to include other pertinent information, i.e., RQ, MP, Toxic Inhalation Hazard & Zone, Residue last contained etc.
 - Total quantity by weight, volume, or as appropriate
 - Package type
 - A 24-hour emergency response phone number
 - The required certification statement
 - The shipper's signature certifying compliance
- Offer emergency response information.
- Offer four each of the appropriate placards for each hazard class and package type (i.e., bulk packages/IBC's require the placard with the four digit UN ID #). Non-bulk containers (<450L per container) that contain only the residue of a hazardous material need not be included in the determination of the placarding requirements.
- Properly load and secure containers to pallets and within the vehicle.

Please Note: The above information is provided as a guide. It is not inclusive and should not be used as the sole reference for a compliant shipment. If you have any questions, please contact your chemical sales representative or customer service specialist.

FisherPak Schematic

