

Date:	08/31/2016
Revision #:	2
Revision Date:	02/20/2019

KEG REFILLING AND DEGASSING PROCEDURE



PPT Solvent Purification System

SAFETY INFORMATION:

PRECAUTION: Ground the keg with the copper grounding clamp connected to the solvent system. This will be done with EVERY keg that is filled and degassed.



PRECAUTION: It is highly advised to perform all keg refilling procedures inside a fume hood.

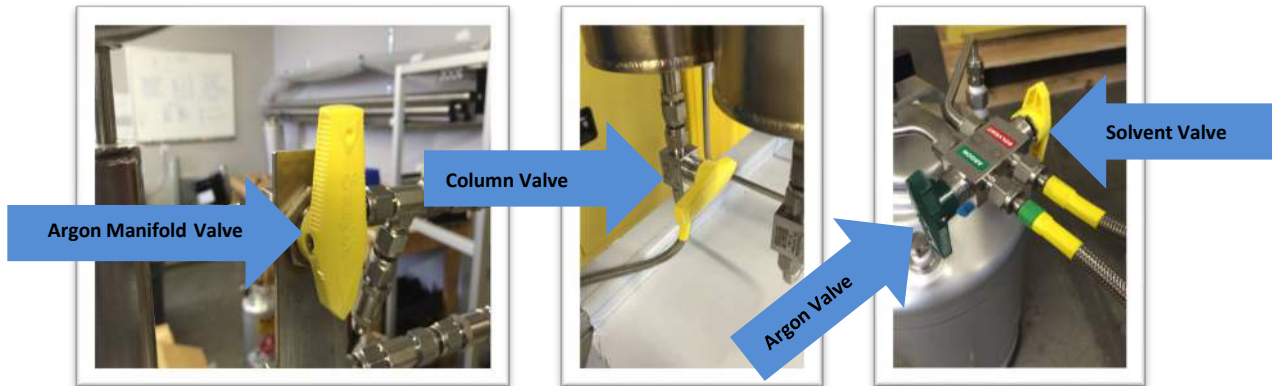
PRECAUTION: Always wear safety glasses and gloves when working with solvent.

Items Needed:

- A. ¼ Teflon Tubing
- B. ¼ Swagelok Plug
- C. 9/16 Wrench



1. Close all of the valves associated with the solvent. This includes:



2. Loosen and disconnect the **ARGON** line that is attached to the valve on the keg.



3. Disconnect the **SOLVENT** line and quickly fasten the 1/4" Swagelok plug to the end of the solvent line.

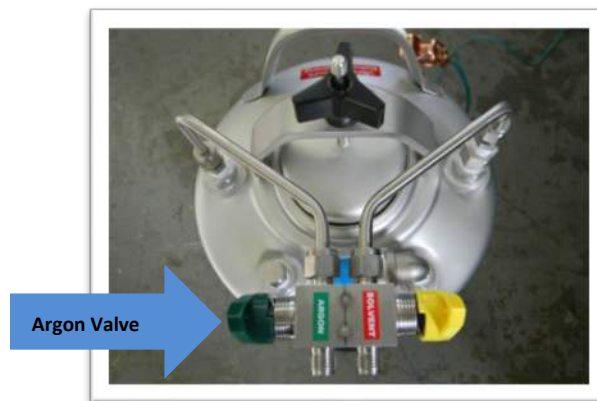


4. Relieve pressure in the keg by opening the **ARGON** valve.

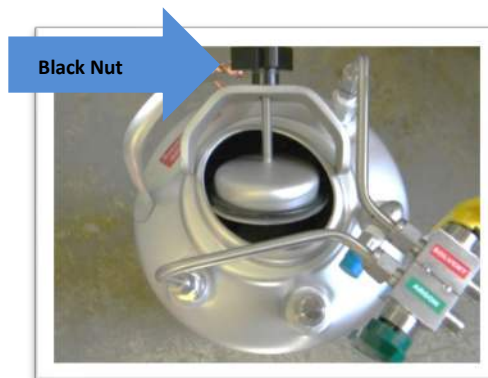
CAUTION: Fumes will emit from the keg when venting.



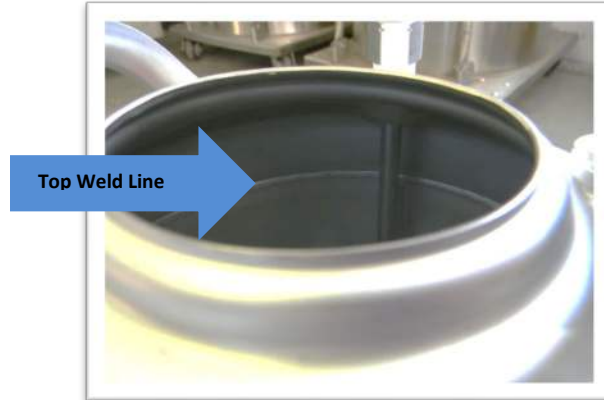
5. Close the **ARGON** valve once the pressure has been relieved.



6. Once the pressure is released from the keg, loosen the black nut and remove the cap assembly.



7. Pour the new solvent into the keg. Be sure to only fill the keg to the top weld line, leaving space for the degassing process.



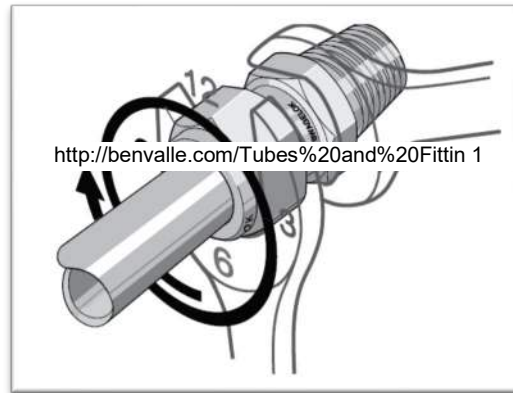
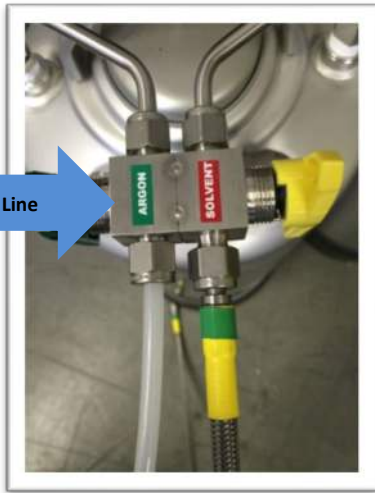
8. Replace the cap assembly and firmly hand tighten the black nut.



9. If the keg is NOT being degassing in a fume hood, attach a Teflon hose to the **ARGON** valve and run it to a ventilation hood.

10. Attach the **ARGON** line to the **SOLVENT** valve and tighten the connection.

CAUTION: Double Check that the **ARGON** line is connected to the **SOLVENT** valve.

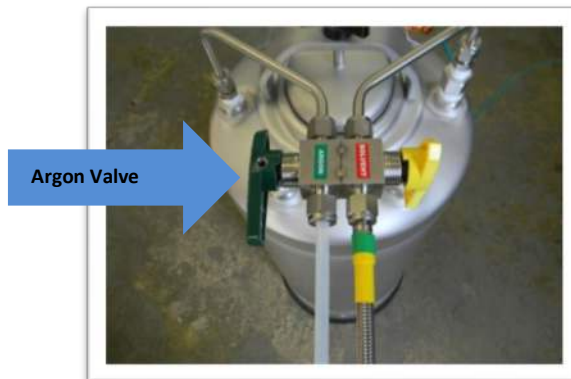


Swagelok Fittings: Finger-tighten and ¼ wrench turn only!

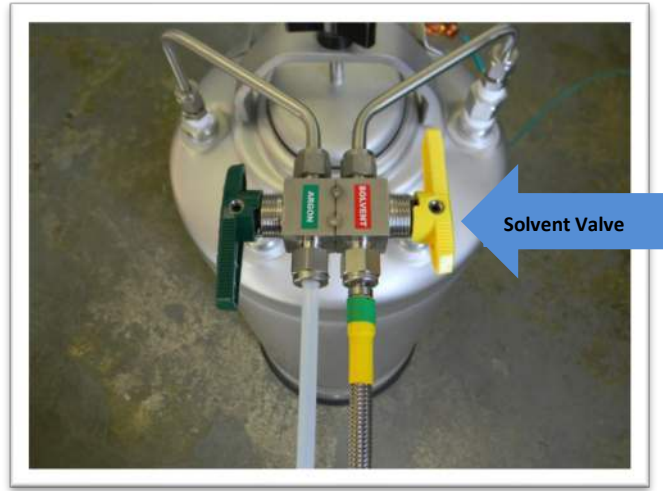
11. Open the Argon Manifold Valve.



12. Open the **ARGON** valve on the keg.

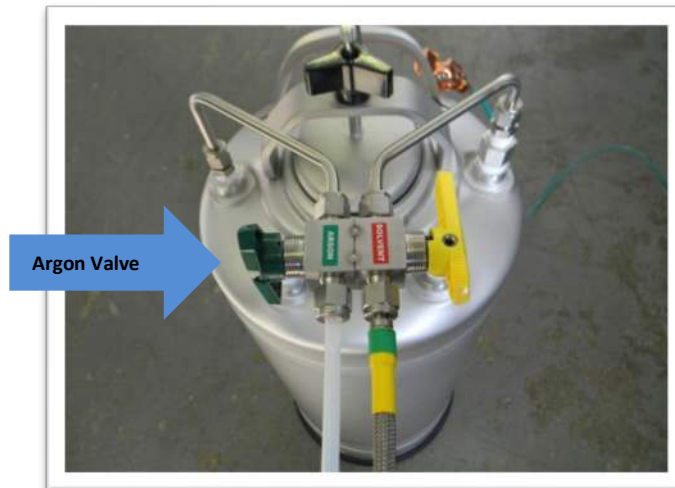


13. Open the **SOLVENT** valve on the keg.

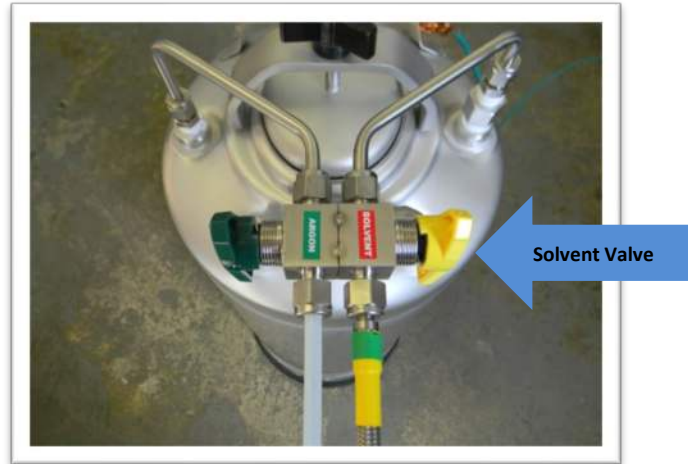


14. Allow the solvent to degas for 30 minutes. A gentle bubbling can be felt through the keg and should not be too vigorous.

15. After 30 minutes, close the **ARGON** valve on the keg.

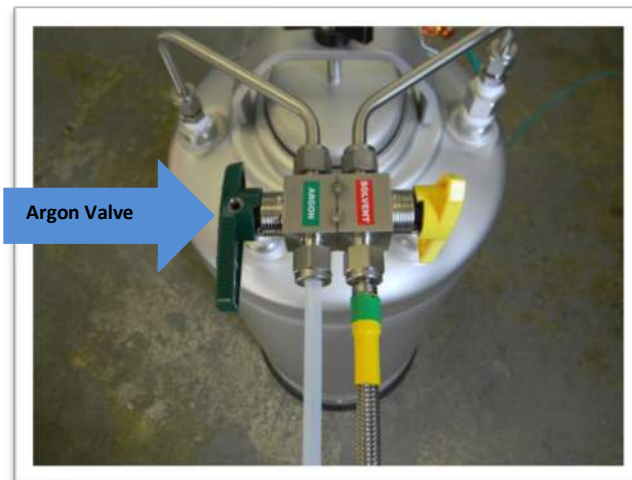


16. Close the **SOLVENT** valve on the keg.

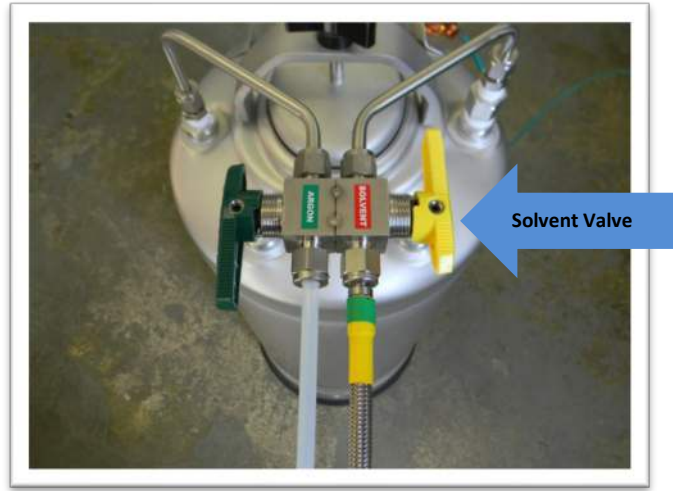


17. Wait 5 minutes for the solvent to settle.

18. Open the **ARGON** valve on the keg.

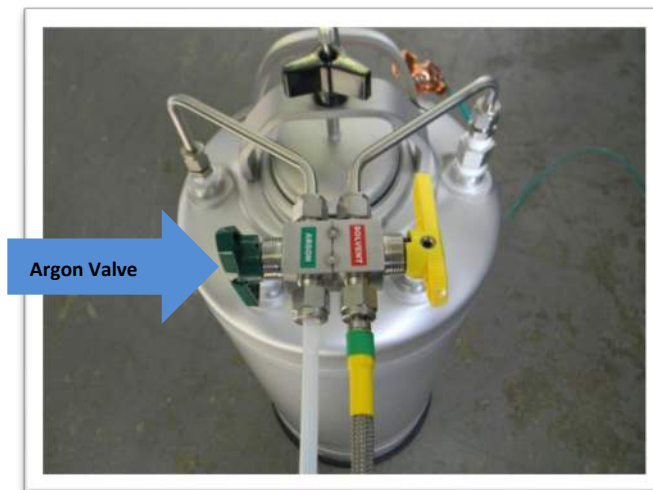


19. Open the **SOLVENT** valve on the keg.

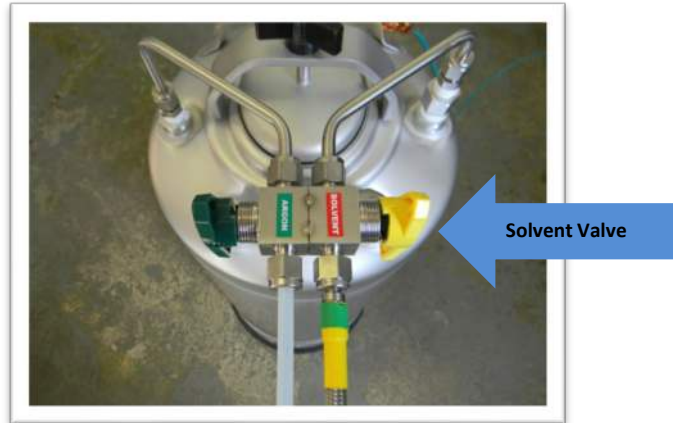


20. Allow the solvent to degas for an additional 15 minutes. A gentle bubbling can be felt through the keg and should not be too vigorous.

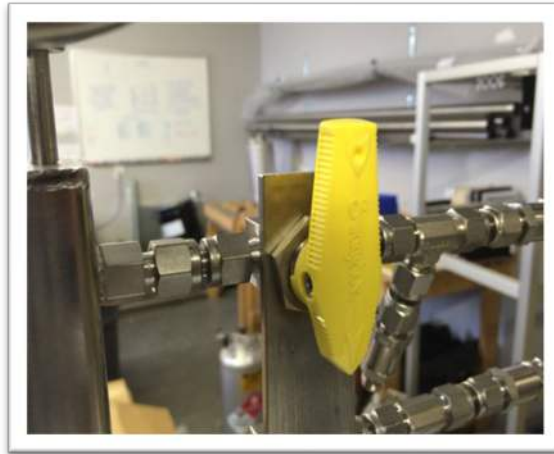
21. After 15 minutes, close the **ARGON** valve on the keg.



22. Close the **SOLVENT** valve on the keg.



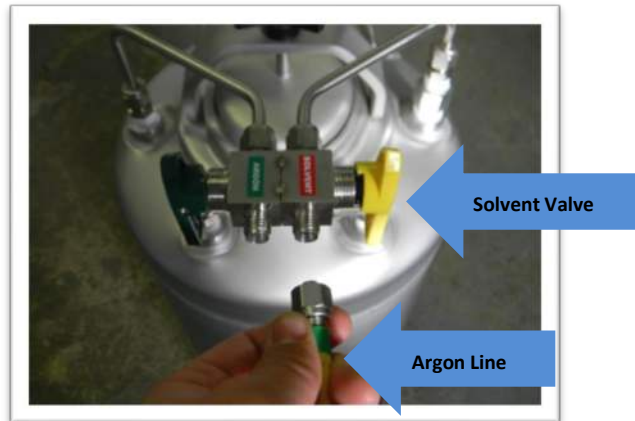
23. Close the Argon Manifold Valve.



24. Disconnect the $\frac{1}{4}$ " Teflon tube from the **ARGON** valve.



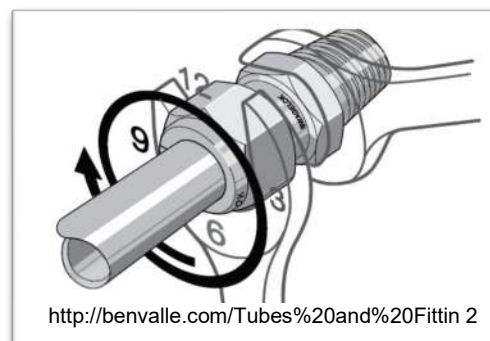
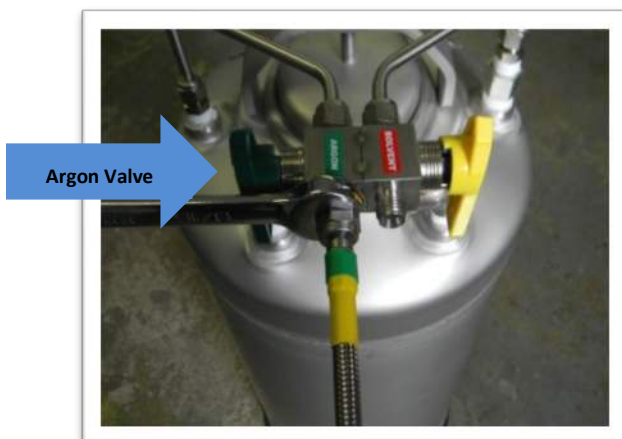
25. Disconnect the **ARGON** line from the **SOLVENT** valve.



26. Open the Argon Manifold Valve halfway.



27. Reconnect and retighten the **ARGON** line to the **ARGON** valve

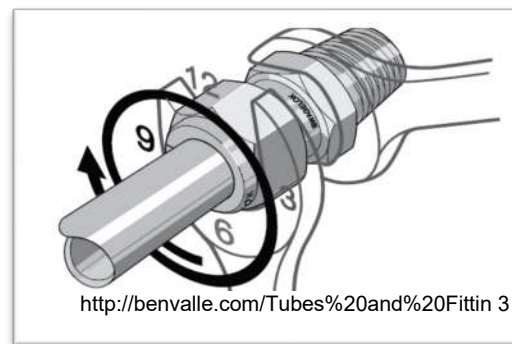
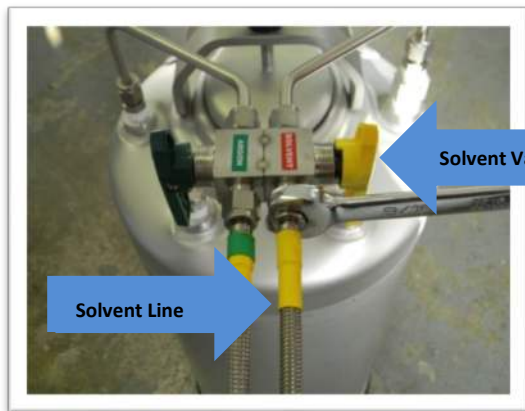


Swagelok Fittings: Finger-tighten and ¼ wrench turn only!

28. Remove the ¼" Swagelok plug from the end of the solvent line.



29. Reconnect and retighten the **SOLVENT** line to the **SOLVENT** valve.

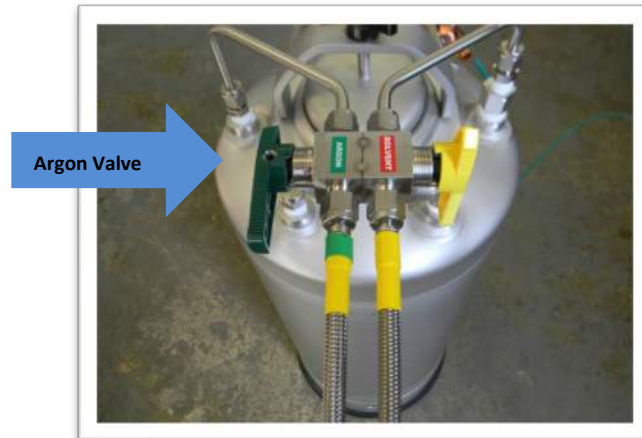


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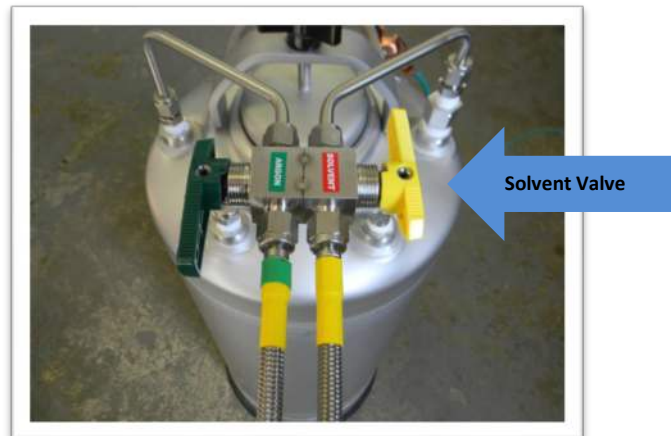
30. Fully open the Argon Manifold valve.



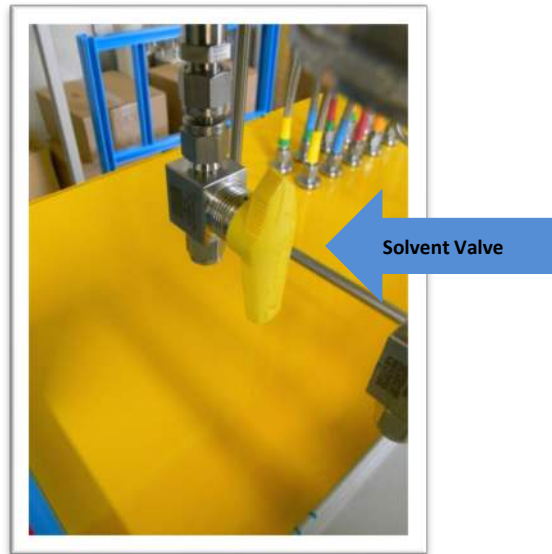
31. Open the **ARGON** valve on the keg.



32. Open the **SOLVENT** valve on the keg.



33. Open the Column Solvent valve.



34. Place the keg back into the cabinet.

To view a video of this procedure, visit our website.

<https://pureprocesstechnology.com/videos/>

