Critical Point Dryer Operations

1. Depress Power (PWR)
2. Remove 3 Knurl nuts and open chamber lid.
3. Pour in small amount (1 ml or so) of alcohol.
   Do not use Acetone.
4. Insert specimen or specimen holder.
5. Replace chamber lid and handtighten knurl nuts evenly.
6. Open CO₂ supply tank valve.
7. Depress COOL.
8. When chamber temperature reaches 0°C, switch COOL off.
   Shut off tank.
   Depress COOL until hissing stops COOL off.
9. Depress FILL. Very slowly open tank valve. Allow chamber to fill. If you don’t have 800 psi, you are too low on liquid CO₂.
10. Recycle COOL to maintain chamber at 0°C.
    Keep chamber cooled to 0°C in subsequent steps.
11. Depress PURGE.
    Catch exhaust from copper pipe onto paper towel. Check for ethanol wet spots (‘oily’ spots). Adjust flow rate with Purge valve.
12. Recycle COOL on and off to maintain chamber at 0°C.
13. When no ‘oily’ spots are observed, PURGE off.
14. Leave FILL on. Be sure chamber is filled.
15. Let sample sit for 5 minutes and repeat steps 11-14. Keep chamber at 0 °C.

Fill off, purge off, chamber at 0 °C

16. Depress HEAT (HT)

17. Wait until temp is above 35, pressure at or above 1300 psi.

Temperature will automatically cycle between 35 °C and 41 °C

18. Depress BLEED (BLD)

19. When chamber pressure reaches 150, psi (about 15 min), depress VENT.

20. After needle reaches the ‘e’ in ZERO on the gauge, remove knurl nuts and chamber lid.
Transfer dried specimen to appropriate holding condition.

21. HEAT: off
BLEED: off
VENT: off
POWER: off.

22 Log usage on sheet.