Ultracentrifuges

Optima TL Tabletop ultracentrifuge (PSC 543, 559, 637, NSC 340, 460)

Every time you use the Ultracentrifuge, you MUST sign the log book. Balance all tubes very carefully (weight balance not eye level). Make sure tubes are sealed completely and all O-rings are intact and present on rotor lid. Clean up any spills in the rotor and/or the ultracentrifuge. If you use a swinging bucket rotor, make absolutely sure that both hooks are on the bar. Most rotor accidents are from swinging bucket rotors.

ATTENTION!!! If the ultracentrifuge is not working for any reason, press clear and try again.

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Beckman Tabletop ultracentrifuge, Optima TL

- 1. Power on. Log in run in log book.
- 2. All tubes must be as closely balanced as you can get them.
- 3. Make sure all quick-seal tubes are properly sealed. To check seal, hold sealed end pointing away from your face, gently squeeze the tube. There shouldn't be any oozing. If there is, try to reseal. If this doesn't work, put sample in a new tube and try again. Failure to check for a proper seal, will probably end with the loss of the sample. Improperly sealed tubes, usually collapse during a run and get all over the rotor.
- 4. Press door button. Open lid as soon as vacuum stops. If you wait, the vacuum will automatically start up again.
- 5. Put in rotor and spin slightly to make sure it's sitting properly. Before loading, be sure that all used slots are balanced. Push button down in middle of rotor.
- 6. To set speed press speed button. The speed starts flashing. Type in the new speed. Press enter.
- 7. To set time press time button. The time starts flashing. Type in the new time. Press enter.
- 8. To set temp. press temp. button. The temp. starts flashing. Type in the new temp. Press enter. Precool chamber with vacuum on.
- 9. Close door and let vacuum go for about 10 min.
- 10. Press Start. Come back after about 30 min. to make sure that everything is at the speed and temp. you set. If the vacuum doesn't get to the correct pressure, the run will stop.
- 11. To Stop, press Stop button.
- 12. Once vacuum is released, press door button and open door. Push button in middle or rotor to release rotor. If your finger doesn't work, use the end of a ball point pen.
- 13. Close door.
- 14. Turn power off. Log run time in log book.
- 15. If there are ANY spills in the centrifuge, clean the drum out with water. If there are ANY spills or collapsed tubes, clean out the rotor and air dry completely.