

## **Glovebox Rules and Guidelines**

Before using the glovebox for the first time please see me (Castellani) for a demonstration and check-out.

### **Important**

When working in the glovebox you must remove all jewelry from your hands and wrists. You must wear latex or cotton gloves while working in the glovebox. You will probably find wearing a long sleeve shirt is more comfortable.

Do not bring liquids into the glove box unless cleared by me. Closed containers must be evacuated before being placed in the antechamber. They can explode from the pressure difference. Containers that cannot be evacuated must be placed under a pure nitrogen atmosphere and strongly secured.

1. Make sure that no one has exited the antechamber in the last 20 minutes by checking the log book.
2. Close the valve to the pump by turning it parallel to the port. Open the red valve in the front, lower left-hand corner of the antechamber area by turning it parallel to the floor.
3. When the pressure on the gauge reads zero and there are at least ten seconds between solenoid clicks close the red valve (turn vertical).
4. Open the outer antechamber door and insert a pan containing your sample and equipment.
5. Close the antechamber and open the handle to the pump to evacuate the antechamber. Fill in the log book. Under equipment, list only the chemicals you bring in (if no chemicals, write "glass").
6. After 20 min, close the valve to the pump and open the red valve to refill the antechamber. Close this valve when done. You may place your arms in the gloves while the antechamber is refilling.
7. Bring your sample in through the door and work it up. Keep the door closed while working and do not touch the inside of the circular plate with the gloves. It is best to place a pair of the latex gloves over the black gloves. Be careful not to use sharp objects near the gloves. If one is torn use the glove-hole sealing device immediately. To control the pressure inside the glove box use the Pedatrol. Depressing the right side raised the pressure while the left side lowers it. If the alarm sounds stop what you are doing immediately and the box should correct itself. If the alarm persists press the release button on the top controller box.
8. Put your tray back into the antechamber. Make sure all waste paper and solids are removed (including the latex gloves). Close the antechamber door. Make sure the red valve is closed.
9. Remove your tray from the antechamber, close the door, and evacuate the antechamber. Log out.