

SOP: Glove box (Room Ø208)

Contact person / responsible for the equipment:

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Ø 304/306, phone 41637080

No one is allowed to use the equipment without going to a training session with the responsible person the first time.

Almost all volatile organic compounds may poison the catalyst in the box. Please avoid as far as possible to bring such compounds into the box. All liquids must be degassed before brought into the box.

- 1. Write your name on the list attached to the box when using the glove box.**
- 2. Keep the box tidy**
- 3. Anything that shall be stored in the box must be clearly marked and the list of chemicals in the box must be updated. Users from outside the Gundersen group, must not store anything in the box without permission from L-L Gundersen.**

Before using the box, the atmosphere in the box must be cleaned. A couple of hours before you plan to use the box do the following:

1. Make sure the nitrogen or argon cylinder has a pressure of. ca. 6 bar
2. Turn on the cooling water (2 - 3 L/min)
3. Turn on vacuum pump
4. Turn on circulation
5. Turn of the vacuum pump after 2 - 3 min.

After a couple of hours, you may use the box. Please use the small chamber for bringing in and out things whenever possible.

1. Turn on vacuum pump
2. Turn off cooling water
3. Turn on circulation
4. **Make sure the door between the chamber for bringing in things and the box is closed.**
5. Open the outer door to the chamber and put in your things. **These must be absolutely dry.** Close the outer door to the chamber.
6. Evacuate the chamber until a stable and low pressure. Refill the chamber (to atm. pressure). Repeat evacuation and refilling a couple of times. The small chamber is evacuated and

refilled using the handle under the chamber. The large chamber is evacuated and refilled by pushing the buttons "ante chamber evacuate" and "ante chamber refill". **Du not touch the gloves while evacuating or refilling.**

7. Open the inner door and bring your things into the box.
8. Do your planned work. **If you spill anything tidy up after you.**
9. When you are taking things out of the box, seal flasks and put the equipment back into the chamber. Remember to bring with you any tissue paper etc. used for cleaning. **Update the chemical list if you remove a chemical**
- 10. Close the inner door.**
11. Open the outer door and remove your things from the chamber
12. Close the outer door and evacuate and refill (procedure, see point 6 above) the chamber twice
13. Turn of the pump
- 14. If any irregularities (lack of gas, ruptures on gloves, spillage etc.) are observed when using the box, report to the responsible person immediately.**