

Multireactor checklist

This checklist is not for training nor a replacement for SOP. User must read the SOP and must be trained by the person in charge in advanced.

1. Preparatory phase

- a. Wear appropriate PPE and check hood flow.
 - Use detectors for toxic gases
- b. **Do not use toxic gas alone. Ask someone to be around you.**
- c. Check gas connections.
 - Confirm identity of gas and change if necessary.
 - Check CGA number on the regulator and cylinder.
N₂ – 580, H₂ – 350, CO – 350, C₂H₄ – 350, CO₂ – 320
 - Check for leaks on the regulator and the manifold.

2. Run phase

- a. Charge low pressure first and check for leak on the vessel.
- b. **Keep an eye on temperature and pressure until stabilized.**
- c. **Don't forget to vent the manifold and close the cylinder.**
- d. Close the sash and set up an SOC.

3. Workup phase

- a. Check reactions are in the expected temperature and pressure.
- b. **Plan for quenching potential hazardous chemicals in the reaction mixture.**
 - Use I₂/acetone bubbler for potential generation of Ni(CO)₄.
- c. Vent before opening the vessel.
 - Make sure the vessels are cooled enough before venting.**
 - Vent slowly to prevent shattering and bumping.