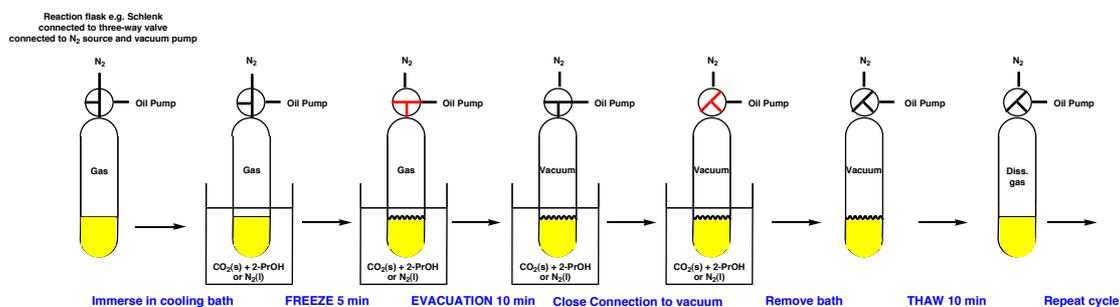


SYNMET RECOMMENDATIONS 2013

1. Liquid starting materials are measured by volume rather than by weight.
2. Air bubbles in syringes may cause dripping from the needle tip. Bubbles are removed by bending the needle until the syringe points upwise-down. Bubbles are collected over the liquid and pressed out the syringe with the piston.
3. Always discard needles or protect needle tips immediately after use.
4. Save money and cuts by replacing glass with polypropylene that is inert to almost all chemicals (but turns soft above ca 60 °C). Perfect for T-tubes, measuring cylinders, etc.
5. Extensive manipulations like weighing in inert atmosphere is performed using plastic bag technique or glove box. Wrap the bag-opening around a B-29 joint on a three-way valve for easy handling.
6. Grease joints that becomes cold during low temperature operations.
7. Use normal tubes and not needles by addition or exhaust of gasses to avoid pressure build up due to the limited capacity of needles.
8. Do not pass nitrogen over sensitive reaction mixtures for extended periods of time since water, oxygen and impurities may accumulate. Moreover volatile products may be lost and solvents stripped off causing loss of temperature control and thermal decomposition.
9. N₂-bubbler securing a minute over-pressure in the set-up are mounted after the outlet from reaction flasks. This also applies when working with low boiling liquids.
10. Security flask are connected so that back-suction is impossible. Consider montage at the outlet of a funnel situated with its rim just below surface of protecting or absorbant liquid.
11. Gasses can stand-by and be transported in ballons mounted on a syringe with needle stuck into the rim of a rubber septum or a short piece of rubber tube.
12. Fold down the collar of rubber septa to be pierced during a reaction.
13. Consider decomposition of gaseous exhaust before letting it free.
14. Always cool before and during evacuation when degassing by Freeze-Vacuum-Thaw sequences:



15. Avoid exsiccators under vacuum since they are potential grenades. In stead dry on a vacuum line.