

## Group Cleanup

We do a comprehensive cleanup of all our lab space every 6 months, including equipment maintenance. The list below details the tasks that are to be done at each of these large group cleanups, organized respectively by items that should be done by every lab member, individuals or small groups, and individuals with specific group jobs.

Although most of these tasks should be done individually on a regular – if not daily – basis, the semiannual cleanup ensures that the lab both gets a refresh and follows periodic safety measures (peroxide testing, reagent quenching, *etc*).

### A. General Safety Guidelines & PPE:

Full PPE (goggles or facemask, gloves, and labcoat) must be worn at all times, and additional safety measures should be taken as required by other SOPs related to specific tasks and equipment.

Caution should be taken when using nitric or piranha acid (see Cleaning Glassware SOP), quenching sodium pots (see Solvent Pots SOP), and handling chemicals that have potentially generated explosive peroxides. If crystalline material is seen on/around the cap of a peroxide-forming chemical, DO NOT OPEN IT as peroxides are shock/friction sensitive, and instead call DEHS (612-626-6002) for disposal. Also call DEHS for disposal if a peroxide-forming chemical has been stored for more than 2 years. Handle each with great care.

### B. Individual Cleanup Tasks:

Prior to group cleanup day, students should clean their individual lab spaces. This will make group cleanup faster and easier. Keep in mind that this should not be the *only* time students clean their individual spaces!

- Change pump oil on Schlenk line pump
- Clean Schlenk line – wash out if necessary, replace tubing, regrease joints.
- Manifest waste
- Clean benchtop and fume hood
- Return chemicals and glassware to common storage spaces
- Transfer samples to vials/bottles if stored in reaction flasks
- Replace acid and base baths
- Organize individual supplies in glovebox

### C. Group Cleanup Tasks:

- Clean group office
- Clean common spaces in the lab (balance area, supply storage area)
- Return used chemicals and reinventory the chemical inventory
- Clean/wipe down hotplates, stirplates, balances, and sonicators

- Clean out rotavaps and test for proper seals/vacuum
- Quench old solvent/reagent pots
- Manifest spoiled reagents as hazardous waste (*e.g.* Li alkyls with significant solids, old bottles)
- Test peroxide forming solvents for peroxides using the test trips located in the fridge. Manifest/dispose as waste if needed (80-400 ppm peroxide), or call DEHS for safe removal (> 400 ppm peroxide), and mark and date all tested solvents.
- Clean clogged and/or stained frits with nitric acid or piranha solution
- Clean gloveboxes
  - Change pump oil on all pumps
  - Replace plastic mat flooring
  - Replace all solvents with new solvent and fresh sieves
  - Replace alumina and sieves
  - Replace vacuum tubing in the box
  - Make new ketyl test solution
  - Refill glovebox supplies
  - Clean front plate (use dry towels, not solvent!)
  - Replace gloves as necessary
- Redistribute glassware between labs and gather broken glassware to be fixed
- Remove unneeded glassware from ovens
- Sweep and mop floors
- Send out equipment in need of repair

By signing below, you indicate that you have read and understand the content of this document.

Name: \_\_\_\_\_

Date: \_\_\_\_\_