Back to the lab

Laboratory equipment checklist

Here are a few practical reminders to keep in mind for maintaining your equipment

✓ Check the qualified state of your equipment- schedule if overdue
✓ Schedule your next preventative maintenance, calibrations, or certifications
✓ Consult equipment manuals for start-up recommendations- available on www.thermofisher.com
✓ Check stock and order replacement supplies for equipment like tubing, bottles, tubes, filters and reagents
✓ Check expiration dates on reagents for replacement
✓ Label reagent/sample vials (including open date, expiration date)
✓ Replace bench top protectors and contamination control mats
✓ Calibrate pipettors or send them to a service
✓ Wipe down the handles and exterior of the equipment
✓ Remember to clean corners of the lab and top of and under equipment where dust can collect
✓ Activate the sterilization cycles on your CO₂ Incubators before start-up per manual
✓ Order cleaning supplies for the lab- 70% ethanol and quaternary ammonium disinfectants
✓ Check gas supply levels to your equipment and schedule replacement
✓ Clean the interior the equipment - BSCs, incubators, shakers, centrifuges, and baths - with recommended disinfectant (remember no bleach)
✓ Wipe bench top surfaces, pipettors, pipet tip boxes with ethanol/DNase/RNase
- Autoclave water for your sterile water needs like baths and incubators
- Clean gaskets by removing ice, frost, or condensation
- Inspect gaskets for damage, replace if needed
- Eliminate cardboard storage around refrigerators and freezers because can get wet and breed fungi.
- Test the operation on your tabletop equipment prior to use
- Order recommended replacements parts and consumables for annual maintenance.
- Replace HEPA filters in your CO₂ incubators
- Drain and refill your pH and ion selective electrodes. Change the storage solution
- Clean or replace the front grill filter on your ULT
- If capable, download data and verify last two months of ULT performance
- Check LN₂ levels in all manual dewars per manual or auto-fill dewars
- Verify tight connections (water, electrical, and CO₂/LN₂ back-up) to your equipment
- Clean down your SpeedVac system, change out the CryoCool from the cold trap and change the oil from your oil pump
- Clean condenser fins with compressed air in heated/refrigerated bathes per manual
- Inspect your centrifuge rotors for any damage or pitting
- Record the maintenance of your equipment in your equipment log
- Validate the calibration of your setting with secondary probes or monitors