

Flammable Solvent Tracking

The State of NC Building Code administered by the NC Department of Insurance requires that the quantity of various classes of flammable liquids be maintained below certain thresholds. To comply with these requirements the Chemistry Department maintains a flammable liquid tracking program to insure that the quantity of flammable solvent in each laboratory does not exceed the maximum permitted. DOI is the state authority which sets and enforces the safety and building code standards applicable to all state agencies including the campus of NC State University. We have no choice but to comply with their policies. The operation of the flammable solvent inventory system is addressed below:

1. Each new container of flammable solvent (4 liter or larger) purchased for use in either Dabney or Cox will have a barcoded label affixed to it by supplyroom personnel. The labeling applies both to solvents purchased directly from external vendors and those purchased from the supplyroom.
2. When the solvent is picked up or delivered, the individual receiving the solvent will be asked to indicate the room number where the solvent will be stored.
3. The barcode uniquely identifies each container of flammable solvent and will be used to generate an inventory of flammable solvent by room. Consequently it is important that empty solvent containers which are to be discarded be brought to the supplyroom so they may be removed from the inventory. If you will call or email the supplyroom indicating that you have empty solvent containers to be discarded, someone will come pick them up and have them removed from the inventory. Solvent containers which are reused as containers for waste solvent will be brought by the stockroom for removal from the inventory by the hazardous waste contractor during the process of removing the waste from the department.
4. Flammable solvent containers will remain in the inventory until removed by the bar code reader in the supplyroom. Please DO NOT discard solvent containers without first having them removed from the flammable solvent inventory maintained in the supplyroom.
5. The department maintains an inventory of empty 20L solvent cans and 4L glass bottles in its solvent storage area outside of Dabney. To obtain one or more of these containers for use as a waste solvent container, please contact the Chemistry Supplyroom.
6. Periodically the inventory of flammable solvent in each laboratory will be compared with the amount legally permitted. If the level exceeds the legal maximum (see below), a message warning that the level has been exceeded will be sent to the faculty member responsible for the laboratory involved. No additional flammable solvent will be allowed in the laboratory until the flammable solvent inventory has been reduced below the legal limit.

Maximum levels of flammable solvents permitted: a laboratory may have either one 45 gallon flammable storage cabinet or two 30 gallon flammable storage cabinets. There may be no more than 10 gallons of flammable solvent which is not in a flammable storage cabinet. In other words, a laboratory with a single 45 gallon storage cabinet may have a total of 55 gallons of flammable solvent. A laboratory with two 30 gallon flammable storage cabinets may have a total of 70 gallons of flammable solvent. **Waste solvent is included in these totals.**