

SAFETY INSPECTION CHECKLIST

for Department of Chemistry Research Laboratories

EMERGENCY EQUIPMENT

fire extinguishers near exit, charged and appropriate type and size
appropriate spill kits available in laboratory
safety shower and eyewash fountain tested quarterly by lab occupants, annually by
Environmental Health & Safety

FUME HOODS & VENTILATION

hood operating in "normal" range, alarm system enabled
air flow in hood unobstructed – hood not cluttered, items behind 6" line, large items on
blocks, baffle area clear
hood not used for storage unless designated and signed "for storage only"
hood or appropriate gas trap used when hazardous gases or fumes are created
special hood in REN 315 used for work with perchloric acid
vacuum pumps filtered or vented to exhaust system
windows closed

PERSONAL PROTECTION

eye protection: splash/impact protective goggles used when working with liquids, safety
specs with side shields acceptable otherwise
visitors provided safety glasses
proper gloves and clothing (long pants, closed-toe shoes, lab coat) worn
gloves and lab coats removed before exit laboratory
long hair constrained

CHEMICALS & COMPRESSED GAS CYLINDERS

material safety data sheets available for all chemicals used in lab
chemicals separated and stored by class (e.g., store acids away from bases, reducing
agents away from oxidizing agents)
chemicals stored away from heat and direct sunlight
flammable liquids stored in approved safety containers or in solvent cabinet
chemicals stored in proper containers with lids
highly toxic chemicals stored in locked cabinets
liquids stored below eye level
no chemicals stored on floor
no chemicals in or around sink
shelves have raised edges and are securely mounted
compressed gas cylinders secured individually
gas cylinders capped when not in use
lecture bottles stored in racks, clamped, or on sides

CHEMICAL WASTE

waste separated by class and clearly labeled (substance, amount, date added) in proper,
closed containers
waste containers labeled either "hazardous waste" or "non-hazardous waste"
waste accumulation forms placed near waste bottles
disposal requests submitted promptly using Chemical Track system

LABELS & SIGNS

all chemical containers labeled in English and dated
all reactions of long duration (overnight or longer) labeled: structure/formula, initials
signs posted for special hazards (e.g., lasers, UV lamps, radioactive materials)
chemical cabinets labeled (e.g., flammable, acid, base)
posted in all labs: this checklist, emergency procedures, general policy on working in
research laboratories, hazardous materials disposal procedures, blood-borne pathogen
safety guidelines, emergency contact information (label on outside of door), and eyewash
fountain and safety shower use and testing sheet

OBSTRUCTIONS & HAZARDS

emergency exit unobstructed and unlocked
taped area under safety shower and eyewash fountain kept clear
aisles and paths unobstructed
no cords, tubing obstructing or dangling in paths
belt guards on pumps
apparatus properly set up
floor and benchtops clear of spills
no bicycles in laboratories

ELECTRICAL HAZARDS

cords in good condition
extension cords used on a permanent basis are fuse or circuit breaker protected
no more than one extension cord per instrument
cords may not run through doorways or ceiling tile grid

HOUSEKEEPING

no broken glass, bare needles, chemical spills, trash, etc. on benches
hazardous materials and glassware away from edges of benches
sinks clear, matting or screen over drain
sharps for disposal kept in separate, marked container
refrigerator clean, freezer defrosted

FOOD & BEVERAGES

food, beverages, coffee makers, etc. are not permitted in any laboratory
laboratory water is not potable; use water from fountains or restrooms

This list is not all-inclusive but provides general guidelines for laboratory safety. Laboratories will be inspected monthly during the academic year. Every laboratory must have in a prominent location a copy of the American Chemical Society's booklet, Safety in Academic Chemistry Laboratories. Refer to this booklet for additional policies and recommendations. Additional precautions may be required by laboratory supervisors.

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