

Best Practices for Chemical Storage

Always...

- ...sore chemicals in containers made from compatible materials.
- ...store chemicals in cool, well-ventilated rooms.
- ...store chemicals based on well-chosen, prioritized hazard categories.
- ...store chemicals with secondary containment to protect containers and shelving.
- ...return chemicals to storage after use.
- ...prepare appropriate labels for secondary containers which adequately describe the contents and hazards.
- ...place chemical containers at least 4 from the edge of the shelving which is not fitted with lips or doors.

Never...

- ...store flammable solvents in a domestic refrigerator.
- ...store chemicals in direct sunlight.
- ...store food in a refrigerator where laboratory chemicals are stored.
- ...store chemicals above eye level (typically not above 5).
- ... stack one bottle on the top of a second bottle.
- ...store chemicals in a hood where experiments take place.
- ...store chemical containers on the floor.
- ...arrange chemicals on shelves in alphabetical order.
- ...arrange chemicals on shelves in random order.

On a regular basis...

- ...check all containers for evidence of spills, cracks, or deterioration (quarterly).
- ...check container lids for cracking (quarterly).
- ...check labels for deterioration or peeling (quarterly).
- ...reconcile inventory and SDSs (semiannually).
- ...cull outdated or unused chemicals (semiannually).
- ...check shelving for evidence of damage (stains, spills, rust, discoloration, etc.) (annually).

Before adding chemicals, check shelving...

- ...to ensure that it is strong enough to support the chemical load.
- ...to make sure that it is constructed of an inappropriate material for the chemicals it will hold (i.e., metal for corrosive chemicals; wood for oxidizing chemicals).
- ...to make sure that the shelves are fitted with raised lip, tilted slightly backward, or have closing doors.
- ...to make sure the shelving is securely fastened to a permanent structure, such as wall, floor, or benchtop.
- ... to ensure that there is an inadequate amount of shelving to avoid overcrowding or an inability to physically separate incompatible chemicals.