
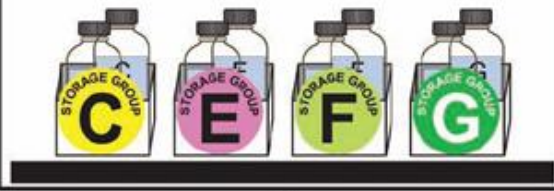




## Chemical Storage

Laboratory chemicals and reagents must be stored safely. Some chemical classes may be stored together and some should be segregated to prevent the inadvertent reaction of incompatible materials. At a minimum, the following Hazard Classes should be segregated from one another:

- Corrosives
- Strong acids segregated from strong bases
- Inorganic acids segregated from organic acids, same for bases
- Oxidizers
- Flammable Liquids
- Highly Toxic
- Highly Reactive

The chart below, from the 2011 edition of *Prudent Practices in the Laboratory*, shows how hazardous chemicals should be segregated within the same cabinet. This should be done only if enough there is not enough room available in the laboratory to allow separate cabinets for each chemical class.

<b>STORAGE GROUPS</b> Store chemicals in separate secondary containment and cabinets		If space does not allow Storage Groups to be kept in separate cabinets the following scheme can be used with extra care taken to provide stable, uncrowded, and carefully monitored conditions.	
<b>A</b>	Compatible Organic Bases		
<b>B</b>	Compatible Pyrophoric & Water-Reactive Materials		
<b>C</b>	Compatible Inorganic Bases		
<b>D</b>	Compatible Organic Acids		
<b>E</b>	Compatible Oxidizers including Peroxides	Storage Group X must be segregated from all other chemicals.	
<b>F</b>	Compatible Inorganic Acids not including Oxidizers or Combustible	Storage Group B is not compatible with any other storage group.	
<b>G</b>	Not Intrinsically Reactive or Flammable or Combustible		
<b>J*</b>	Poison Compressed Gases		
<b>K*</b>	Compatible Explosive or other highly Unstable Material		
<b>L</b>	Non-Reactive Flammable and Combustible, including solvents		
<b>X*</b>	Incompatible with ALL other storage groups		

\*Storage Groups J, K, and X: Consult EHS Department. For specific storage, consult manufacturer's MSDS.

LEAD updated 08/17/2019

## **Flammable Materials**

Flammable materials must be stored inside of a flammable material cabinet. This may be storage space beneath your chemical fume hood that is designed and allocated for the storage of flammable materials or it may be a separate flammable materials storage cabinet. The quantity of flammable materials located outside of a flammable materials cabinet should be limited to materials that are "in use." The maximum quantity of flammable liquids stored outside of a flammable materials cabinet is not to exceed 10 gallons (40 liters). Flammable solids must also be stored within a flammable materials cabinet and should be segregated from flammable liquids using secondary containment.

For additional guidance on the safe storage and handling of chemicals consult the manufacturer's safety data sheet (SDS) or contact the Office of Research Safety Affairs by calling 8-6114 or emailing [labsafety@uthsc.edu](mailto:labsafety@uthsc.edu).