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.
Flammable Materials

Flammable materials must be stored inside of a flammable material cabinet. This may 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 manufacturers safety data sheet (SDS) or contact the Office of Research Safety Affairs by calling 8-6114 or emailing labsafety@uthsc.edu.