Segregation of chemicals

Chemical substances could roughly be separated into families according to their hazard class that is relevant to storage (i.e. physical-chemical properties).
Main hazard classes include:

- explosive,
- oxidising,
- flammable (incl. extremely flammable, highly flammable),
- toxic,
- corrosive,
- moisture sensitive,
- heat sensitive,
- photo-sensitive,
- and hazard classes determined by physical properties as well, e.g. compressed gasses, liquid gasses.

General guidelines for segregation of chemicals with different hazardous properties or chemical/physical properties are the following:

- keep acids away from other chemicals like metals and especially metal dust, bases and oxidizing materials;
- keep acids and bases separately;
- keep oxidizing inorganic acids away from organic acids;
- segregate oxidizers from flammable, pyrophoric and combustible substances (e.g. solvents);
- store flammable liquids in approved flammable storage cabinets;
- keep corrosive substances away from substances that may react with them and produce undesirable, toxic products;
- some chemicals have multiple hazards and in such cases strict attention needs to be paid with regards to chemical

storage, e.g., glacial acetic acid is both flammable and corrosive;
- toxics and highly toxics are kept separately from other chemicals;
- toxics that may react with each other are kept separately;
- do not store chemicals alphabetically.

More information for each hazard group and respective precautions can be found here. Chemical storage compatibility by chemical group can be found here and here. But, more importantly, the Safety Data Sheets (section 7) should be consulted for chemical storage as they are to include information specific for the chemical.