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BIOLOGY

# *Chemical Safety*

## *Topics*

- Chemical Storage** ▪
- Chemical Transporting** ▪
- Chemical Manipulation** ▪
- Chemical Disposal/Recycling** ▪

## **Chemical Storage**





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## Chemical Storage- Requirements

1. There must be a list of hazardous.
2. Chemical containers must be labeled, Containers shall be dated when received and opened.
3. Plan ahead for spills, accidents or emergencies.
4. Be aware of special storage conditions such as temperature, humidity or limited shelf life.

## Chemical Storage- General Considerations

1. Segregate chemicals by hazard class or compatibility.
2. If available, use ventilated cabinets for volatile toxics and chemicals with odor.
3. Use approved flammable storage cabinets for flammable liquids.
4. Use secondary containers or for toxic solvents.





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## Refrigerators

1. Do not store food in chemical storage refrigerators.
2. Label chemical storage refrigerators with the following:

### No Food – Chemical Storage Only



Chemical Storage

What to **Avoid** in

1. **Avoid** storing liquid chemicals above eye level.
2. **Avoid** storing chemicals in aisle ways.
3. **Avoid** over stocking shelves.
4. **Avoid** storing heavy containers above shoulder level.
5. **Avoid** storing chemicals near sources of heat or in direct sunshine.

### Corrosives •

Store concentrated acids and bases separately.





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Reactive •

## *Chemical Storage –* *Reactive*

Examples of reactive chemicals would include, but not be limited to:



Water reactive chemicals.



Pyrophors, which react with air.



Store **pyrophoric** chemicals away from flammables.



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**Store thermally unstable chemicals in approved refrigerators. \***