## Chemical Segregation Chart

This chart assists with proper segregation of chemicals in storage and waste. With all chemicals: Check the SDS (Section 7: Handling and Storage, Section 10: Stability and Reactivity) for specific storage requirements. Label all storage areas with the hazard present. Use secondary containment whenever possible for hazardous chemicals, and is required for all waste. Secondary should be large enough to contain 110% of the largest container. For assistance with chemical storage questions, contact complaince@kent.edu, and for all lab and research safety needs, visit https://www.kent.edu/compliance/research-safety-and-compliance.

<table>
<thead>
<tr>
<th>Cat.</th>
<th>GHS Symbol</th>
<th>Chemical Hazard</th>
<th>Examples</th>
<th>Storage</th>
<th>Store away from</th>
</tr>
</thead>
</table>
| Compressed Gas | ![GHS Symbol] | Flammable | Methane, Acetylene, Propane | • Cool, dry area  
• 20 ft. away from oxidizing gases or separated by 5 ft. high wall with 0.5hr fire resistance  
• Secure cylinders upright with two chains/straps | Oxidizing gases  
Toxic gases  
Oxidizing solids |
| Corrosives | ![GHS Symbol] | Oxidizing | Oxygen, Chlorine, Fluorine mixtures | • Cool, dry area  
• 20 ft. away from flammable gases or separated by 5 ft. high wall with 0.5hr fire resistance  
• Secure cylinders upright with two chains/straps | Flammable Gases |
| Poisonous | ![GHS Symbol] | Poisonous | Carbon monoxide, Hydrogen sulfide | • Cool, dry area  
• Away from flammable gases and liquids  
• Secure cylinders upright with two chains/straps | Flammable Gases  
Oxidizing Gases |
| Inorganic Acids | ![GHS Symbol] | Inorganic Acids | Hydrochloric acid, Sulfuric acid, Phosphoric acid | • Separate acid storage cabinet  
• Use a chemically resistant secondary container  
• Metal shelves not recommended due to corrosion | Flammables  
Bases  
Oxidizers  
Organic acids |
| Organic Acids | ![GHS Symbol] | Organic Acids | Acetic acid, Trichloroacetic acid, Lactic acid | • Separate acid storage cabinet  
• Use a chemically resistant secondary container  
• Metal shelves not recommended due to corrosion | Flammables  
Bases  
Oxidizers  
Inorganic acids |
| Oxidizing Acids | ![GHS Symbol] | Oxidizing Acids | Nitric Acid, Perchloric acid, Chromic acid | • Separate acid storage cabinet  
• Use a chemically resistant secondary container  
• Away from flammables and other acid types  
• Metal shelves not recommended due to corrosion | Flammables  
Inorganic acids  
Organic acids  
Bases |
| Bases | ![GHS Symbol] | Bases | Ammonium hydroxide, Potassium hydroxide, Sodium hydroxide | • Storage cabinet separate from all acids  
• Use a chemically resistant secondary container | Flammable liquids  
Oxidizers  
Poisons  
Acids |
| Explosives | ![GHS Symbol] | Explosives | Picric acid (dry), Tri-nitro compounds, Heavy metal azides | • Secure location  
• Away from all other chemicals  
• Protect from falls, impacts, and shocks  
• Contact EH&S for specific guidelines | All other chemicals |
| Flammable Liquids | ![GHS Symbol] | Flammable Liquids | Acetone, Benzene, Methanol | • Flammable storage cabinet  
• Separate, dry, cool area  
• Away from oxidizers and corrosives  
• Peroxide forming chemicals must be dated when opened | Acids/Bases  
Oxidizers  
Poisons |
| Flammable Solids | ![GHS Symbol] | Flammable Solids | Phosphorous Carbon Charcoal | • Flammable storage cabinet  
• Separate, dry, cool area  
• Away from oxidizers and corrosives  
• Peroxide forming chemicals must be dated when opened | Acids/Bases  
Oxidizers  
Poisons |
| Oxidizers | ![GHS Symbol] | Oxidizers | Hydrogen peroxide, Potassium dichromate, Halogens, Nitrate compounds | • Non-combustible cabinet  
• Use a chemically resistant secondary container  
• Away from flammables | Reducing agents  
Flammables  
Organic materials |
| Water Reactive Chemicals | ![GHS Symbol] | Water Reactive Chemicals | Sodium metal, Potassium metal, Lithium Metal | • Dry, cool location  
• Use a chemically resistant secondary container  
• Label location “water reactive” | All aqueous solutions  
Oxidizers |
| Poisons | ![GHS Symbol] | Poisons | Cyanides, Heavy metal compounds | • Cool, dry area  
• Well ventilated area  
• Use a chemically resistant secondary container | Flammables  
Corrosives  
Check Sections 7 & 10 of SDS |
| Skin/Eye Irritants | ![GHS Symbol] | Skin/Eye Irritants | Tris Base, Dichloromethane, Polyvinylpyrrolidone | • Cool, dry area  
• Well ventilated area  
• Use a chemically resistant secondary container | Flammables  
Corrosives  
Check Sections 7 & 10 of SDS |
| Respiratory Tract Irritants | ![GHS Symbol] | Respiratory Tract Irritants | Acrylamide, Chloroform, Formaldehyde | • Secure location, limit access to only trained users  
• Use a chemically resistant secondary container  
• Store separate from flammable and corrosive materials to avoid damage to container | Flammables  
Corrosives  
Check Sections 7 & 10 of SDS |
| Carcinogens Mutagens | ![GHS Symbol] | Carcinogens Mutagens | Acrylamide, Chloroform, Formaldehyde | | |