

## **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 <u>ehslaboratory@ucr.edu</u>, and for all lab and research safety needs, visit <u>ehs.ucr.edu</u>

Cat.	GHS Symbol	Chemical Hazard	Examples	Storage	Store away from
<b>Compressed Gas</b>	$\diamond$	Flammable	Methane Acetylene Propane	<ul> <li>Cool, dry area</li> <li>20 ft. away from oxidizing gases or separated by 5 ft. high wall with 0.5hr fire resistance</li> <li>Secure cylinders upright with two chains/straps</li> </ul>	Oxidizing gases Toxic gases Oxidizing solids
		Oxidizing	Oxygen Chlorine Fluorine mixtures	<ul> <li>Cool, dry area</li> <li>20 ft. away from flammable gases or separated by</li> <li>5 ft. high wall with 0.5hr fire resistance</li> <li>Secure cylinders upright with two chains/straps</li> </ul>	Flammable Gases
		Poisonous	Carbon monoxide Hydrogen sulfide	<ul> <li>Cool, dry area</li> <li>Away from flammable gases and liquids</li> <li>Secure cylinders upright with two chains/straps</li> </ul>	Flammable Gases Oxidizing Gases
Corrosives	J. W. W.	Inorganic Acids	Hydrochloric acid Sulfuric acid Phosphoric acid	<ul> <li>Separate acid storage cabinet</li> <li>Use a chemically resistant secondary container</li> <li>Metal shelves not recommended due to corrosion</li> </ul>	Flammables Bases Oxidizers Organic acids
		Organic Acids	Acetic acid Trichloroacetic acid Lactic acid	<ul> <li>Separate acid storage cabinet</li> <li>Use a chemically resistant secondary container</li> <li>Metal shelves not recommended due to corrosion</li> </ul>	Flammables Bases Oxidizers Inorganic acids
		Oxidizing Acids	Nitric Acid Perchloric acid Chromic acid	<ul> <li>Separate acid storage cabinet</li> <li>Use a chemically resistant secondary container</li> <li>Away from flammables and other acid types</li> <li>Metal shelves not recommended due to corrosion</li> </ul>	Flammables Inorganic acids Organic acids Bases
		Bases	Ammonium hydroxide Potassium hydroxide Sodium hydroxide	<ul><li>Storage cabinet separate from all acids</li><li>Use a chemically resistant secondary container</li></ul>	Flammable liquids Oxidizers Poisons Acids
Reactives		Explosives	Picric acid (dry) Tri-nitro compounds Heavy metal azides	<ul> <li>Secure location</li> <li>Away from all other chemicals</li> <li>Protect from falls, impacts, and shocks</li> <li>Contact EH&amp;S for specific guidelines</li> </ul>	All other chemicals
	*	Flammable Liquids	Acetone Benzene Methanol Phosphorous	<ul> <li>Flammable storage cabinet</li> <li>Separate, dry, cool area</li> <li>Away from oxidizers and corrosives</li> </ul>	Acids/Bases Oxidizers
		Flammable Solids	Carbon Charcoal	<ul> <li>Peroxide forming chemicals must be dated when opened</li> </ul>	Poisons
		Oxidizers	Hydrogen peroxide Potassium dichromate Halogens Nitrate compounds	<ul> <li>Non-combustible cabinet</li> <li>Use a chemically resistant secondary container</li> <li>Away from flammables</li> </ul>	Reducing agents Flammables Organic materials
	No GHS symbol	Water Reactive Chemicals	Sodium metal Potassium metal Lithium Metal	<ul> <li>Dry, cool location</li> <li>Use a chemically resistant secondary container</li> <li>Label location "water reactive"</li> </ul>	All aqueous solutions Oxidizers
Other	<u>Q</u>	Poisons	Cyanides Heavy metal compounds	<ul> <li>Cool, dry area</li> <li>Well ventilated area</li> <li>Use a chemically resistant secondary container</li> </ul>	Flammables Corrosives Check Sections 7 & 10 of SDS
		Skin/Eye Irritants Acute Toxicity Narcotic Effects Respiratory Tract Irritants	Tris Base Dichloromethane Polyvinylpyrrolidone		
		Carcinogens Mutagens Respiratory Sensitizers Target Organ Toxicity Aspiration Toxicity	Acrylamide Chloroform Formaldehyde	<ul> <li>Secure location, limit access to only trained users</li> <li>Use a chemically resistant secondary container</li> <li>Store separate from flammable and corrosive materials to avoid damage to container</li> </ul>	Flammables Corrosives Check Sections 7 & 10 of SDS