

**Haz-Mat Operations Home Works Sheet 1**  
**Chemical Incompatibilities**

Chemical	Incompatible with:	What Happens???
Acetic Acid	Nitric acid, peroxides, permangantes	
Acetic Anhydride	Hydroxyl-containing compounds such as ethylene glycol	
Acetone	Concentrated nitric acid and sulfuric acid mixtures, hydrogen peroxide	
Ammonium nitrate	Acids, metal powders, flammable liquids, chlorates, nitrites,	
Aniline	Nitric acid, hydrogen peroxide	
Calcium oxide	Water	
Carbon, activated	Calcium hypochlorite, other oxidants	
Chlorates	Ammonium salts, acids, sulfur, finely divided organics, combustibles	
Copper	Hydrogen peroxide	
Hydrocarbons (butane, propane, turpentine)	Peroxides	
Hydrogen peroxide	Copper, iron, most metals or their salts, any flammable liquid, combustible materials, aniline	

Hydrogen sulfide	Fuming nitric acid, oxidizing gases	
Iodine	Ammonia aqueous	
Mercury	Ammonia	
Nitric Acid	Acetic acid, acetone, alcohol, aniline, hydrogen sulfide, flammable liquids, flammable gases, nitratable substances	
Oxalic Acid	Silver and mercury and their salts	
Peroxides, organic	Acids (organic or mineral), also avoid friction, store cold	
Potassium perchlorate	Acids	
Potassium permanganate	Glycerol, ethylene glycol, benzaldehyde, sulfuric acid	
Silver and silver salts	Oxalic acid, tartaric acid, ammonium compounds	
Sodium nitrite	Ammonium nitrate and other ammonium salts	
Sulfuric acid	Chlorates, perchlorates, permanganates	