

Pyrophoric and Water Reactive Materials

Hazards:

- Water reactive
- Flammable
 - Ignites when exposed to air and or water.
- Toxic
 - Can damage the liver, kidneys, and central nervous system.
- Peroxide forming
- Corrosive
- Teratogenicity
 - Can cause birth defects

Handling Precautions:

- **Keep water away from the reagents**
- Never work alone or during off hours
- Consult the MSDS before working with the reagents.
- Remove nonessential chemicals and equipment from the fume hood.
- Store combustible materials away from the reagents.
- Use and handle the smallest quantity as possible.



Storage

- Store away from flammables.
- Label the containers containing the reagents.
- Reagents must be stored in a protective solvent such as:
 - Oil
 - Kerosene
 - Inert gas
- **Never** return unused chemicals, the impurities may cause fire or explosion.
- **Never** expose the reagents to the atmosphere.

Disposal

- Pyrophoric reagents are labeled and disposed of as hazardous waste.
- The residue is stored in the appropriate solvent.

Safety Equipment:

- Soda Ash (lime) or Sand to put out fires
 - A class D fire extinguisher
 - **NEVER use water!**
- Eyewash/ Safety Shower
- Fume Hood
- Glove Box



Personal Protective Equipment (PPE):

Eye Protection:

- chemical splash goggles
- safety glasses
- face shield

Do not wear:

- Prescription eye glasses
- Safety glasses
- Splash goggles

Skin Protection

- Nitrile gloves
 - Nitrile gloves are to be worn underneath neoprene gloves.
- **A lab coat or apron (made out of nonflammable material) must be worn!**

Do not wear:

- Synthetic clothing
 - Polyester
 - Nylon
 - Latex
- Open toed shoes