Highly Reactive Chemicals

Highly reactive chemicals are inherently unstable and can react in an uncontrolled manner to liberate heat, toxic gases or explosion. These include shock sensitive chemicals, high-energy <u>oxidizers</u> and <u>peroxide forming chemicals</u>. Before working with these materials, safety information should be reviewed to evaluate proper storage and handling procedures. In addition to common chemical handling guidelines, the following procedures are recommended:

- Use a chemical fume hood with the sash or other containment/exhaust, for all reactions
- Secure reaction equipment properly
- Use impact protection (shields and guards) in addition to chemical splash protection (i.e. eye protection, face shields, gloves, laboratory coats)
- Handle shock-sensitive chemicals gently to avoid friction, grinding and impact
- Dispose of reagents with suspect purity and age.

If the risks are high, experiments should be performed in an isolated facility with explosion venting and explosion-resistant construction.