

## **GENERAL WRITTEN SOP -- Water-Reactive Materials**

*The OSHA Laboratory Standard explicitly requires "standard operating procedures relevant to safety and health considerations to be followed when laboratory work involves the use of hazardous chemicals." If the general SOP in this section do not fulfill this requirement, you must amend and append in some manner so as to comply*

**Special Precautions for Working with Water-Reactive Materials:** *Materials which react with water to produce a flammable or toxic gas, or other hazardous condition are said to be water-reactive. Fire and explosion are serious concerns when working with these materials. Special precautions for safe handling of water-reactive materials will depend on the specific material, and the conditions of use and storage. Contact the Laboratory Safety Manager (953-1067) or EHS (953-4816) for information on the safe use of a specific material. Examples of water-reactive materials include alkali and alkaline earth metals (e.g. Li, Na, K, Ca, Mg), metal hydrides, some metal and nonmetal chlorides (e.g.  $\text{SiCl}_4$ ,  $\text{PCl}_3$ ,  $\text{AlCl}_3$ ), calcium carbide, acid halides and acid anhydrides.*