

Dangerous chemical reactions at home!

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Did you know that mixing some household cleaners could be fatal? Many cleaning products contain aqueous ammonia. Another chemical often used in our homes is bleach – a water solution of sodium hypochlorite. We add bleach to our laundry, and also use it for general cleaning and disinfection in the house. If you mix these two chemicals, a chemical reaction produces toxic gases called chloramines. Breathing these gases can be fatal. You can find many reports of serious injuries and fatalities resulting from mixing these chemicals, as well as other common household chemicals, on the Internet.

In next month's *Beacon* we will discuss a tool called a chemical interaction matrix which many organizations use to communicate potential hazards from mixing incompatible chemicals.

What can you do?

- Share this *Beacon* with your family and friends.
- Take your process safety knowledge home! Because you work with hazardous materials and processes, you have special experience and training which is valuable away from work. Remind your friends and family to follow safety measures as you would at work when handling hazardous materials. You may save a life! For example:
 - Always read warning labels on household products, and follow precautions recommended for use and storage.
 - Always use the recommended protective equipment as specified on the product label.
 - When working with hazardous materials in the home, always ensure that you have good ventilation in the work area to disperse hazardous vapors.
 - Do not mix household products unless you completely understand the potential interactions and consequences.
- Set a good example for your friends and family. When you use hazardous materials at home, treat them with the same respect that you do at work. If you see other people handling hazardous materials without proper safety precautions, help them understand how to use the materials safely.

Take your safety knowledge home and share it!