Cleaning chemicals are used practically everywhere - at home, schools, hospitals, restaurants, and other workplaces. Building maintenance workers, janitors and housekeepers can be exposed to hazardous ingredients if not properly protected and trained on safe handling. Health problems range from skin and eye irritation to respiratory symptoms including asthma.

**What’s in the bottle?**

Depending on the types of products, contents can cause rashes or severe burns to the skin or in the eyes. Inhaling their mists or vapors can cause sore throat, coughing, trouble breathing and wheezing. Some products can also cause or trigger asthma attacks.

Mixing together products that contain bleach and ammonia together can **KILL**. According to the US Environmental Protection Agency (US EPA), there are three types of cleaning products:

- **Cleaners** remove dirt through wiping, scrubbing or mopping.
- **Sanitizers** contain chemicals that reduce, but do not necessarily eliminate, microorganisms such as bacteria, viruses and molds from surfaces.
- **Disinfectants** contain chemicals that destroy or inactivate microorganisms that cause infections.

Choosing the least hazardous product that will do the job is essential in keeping the users safe.
Which one should I buy?

Before buying, decide what is needed. In general, cleaners are the least hazardous. If sanitizing or disinfecting is not required, use a cleaner. Toilets and food preparation areas may need sanitizers while disinfectants are used in hospitals and healthcare facilities.

When purchasing sanitizers and disinfectants, make sure that they are effective for the microorganisms being targeted. Resources are available on the EPA’s webpage “What Are Antimicrobial Pesticides?” ([http://www.epa.gov/appad001/ad_info.htm](http://www.epa.gov/appad001/ad_info.htm))

Keep in mind that “green” products are not necessarily less hazardous. Obtain a Safety Data Sheet (SDS) and review information such as hazardous ingredients; symptoms and health problems; first-aid measures; safety precautions and personal protection; and spill cleanup procedures.

What precautions should I take while cleaning?

Make sure that you are properly trained, understand the job’s hazards, know what to do in case of an emergency; and follow safe work practices. Some of these practices are listed below.

- Review SDSs before performing the job. Follow safe handling procedures including the use of personal protection such as gloves and safety goggles.
- Locate sources of clean running water in case the products splash on your eyes and body.
- NEVER mix together cleaning products that contain bleach and ammonia;
- Know which products must be diluted and how to correctly dilute them;
- Label all containers, using the OSHA’s required GHS labeling system ([April 2014 Health & Safety Bulletin](http://programs.honolulu.hawaii.edu/intranet/node/2011));
- Ensure adequate ventilation to allow sufficient air flow and prevent buildup of hazardous vapors; and
- Wash up after using cleaning chemicals.

Want more information?

- Cleaning ([http://www.epa.gov/epp/pubs/products/cleaning.htm](http://www.epa.gov/epp/pubs/products/cleaning.htm))
- Green Seal ([www.greenseal.org](http://www.greenseal.org))
- Ecologo ([www.ecologo.org](http://www.ecologo.org))