
STANDARD OPERATING PROCEDURE FOR SODIUM HYPOCHLORITE (BLEACH)

I. POTENTIAL HAZARDS:

- Corrosive. May cause severe irritation or damage to eyes or skin. Vapor may irritate eyes and respiratory tract.
- Incompatible with many chemicals/agents. Hazardous gases (including chlorine and chloramines) may be released if bleach is mixed with an incompatible material. Exposure to these gases can cause coughing, shortness of breath, irritation to or burning of the eyes, nose, and throat, chest pain, wheezing, fluid in the lungs, and nausea. Chlorine can also be absorbed through the skin and cause pain, inflammation, swelling, and blistering.
- Strong oxidizer. May initiate or promote combustion in other materials.

II. ENGINEERING CONTROLS:

- An eyewash/drench hose combination unit must be available in the immediate work area for any work with corrosive materials, including bleach.
- If large quantities of corrosives will be used, a safety shower will also be necessary.

III. WORK PRACTICE CONTROLS:

- ALWAYS check the Safety Data Sheet of a chemical/agent before mixing it with bleach to ensure compatibility.
- NEVER mix bleach with an unknown liquid or unknown residue.
- Do not mix bleach with any compound that is incompatible with oxidizers.
- Purchase bleach in the smallest containers that are practical for lab use.
- Work with the smallest practicable amount and lowest practicable concentration.

IV. PERSONAL PROTECTIVE EQUIPMENT (PPE):

- Chemical splash goggles (over prescription glasses),
- Apron,
- Pants or skirts that extend to below the knee,
- Shoes that completely cover the feet,
- Clothing made of natural fibers.

V. TRANSPORTATION AND STORAGE:

- Transport concentrated solution in secondary containment, preferably a polyethylene or other non-reactive acid/solvent bottle carrier.

- Store in well-ventilated areas with secondary containment, such as a non-reactive plastic bin.
- Store below eye level.
- Store away from metal (unless the metal has a corrosion-proof coating), and do not store under the sink.
- Store away from incompatibles and flammable materials. Always check the Safety Data Sheet of other chemicals in the storage area for compatibility with bleach.
- Avoid storing on the floor. If storing on the floor is necessary, use secondary containment.

VI. WASTE DISPOSAL

- If bleach is at or below common household concentration (maximum 10% concentration sodium hypochlorite) it can be discharged in the sink. Waste must be disposed of following Columbia State's Hazardous Waste Policy 06-04-00. Contact the director of Facility Services and Safety for assistance for determining appropriate methods for disposal.