## City of San Angelo 72W College Ave 2nd Floor San Angelo TX 76902



Worksite: Date/Time:	Worksite:	Instructor:	Date/Time:
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# Topic C764: Bleach and Granulated Chlorinating Products

**Introduction:** Bleach is a solution of sodium hypochlorite and water. Bleach and similar chlorinating products are some of the most common types of disinfectants and cleaners. Household bleach products are generally mild while industrial solutions can be very strong. There are also powerful granulated forms of sodium hypochlorite and other chlorinating compounds. All these substances are corrosive so you must take special precautions when handling them.

#### Bleach:

- Keep bleach and all bleach solutions in the appropriate containers.
  - O Clearly label all containers for the types of bleach solutions that are in them.
  - O Do not place bleach in drinking containers, even to temporarily store them. Someone could mistake the bleach for a beverage and accidentally drink it.
- Check all containers for damage before using, refilling, or putting away.
- Store in a stable environment at or near room temperature.
- Do not mix bleach with other products. Bleach can react with household chemicals such as toilet bowl cleaners, rust removers, vinegar, acids, or ammonia to produce hazardous gases.
- If bleach is left too long on metals, it can cause pitting or discoloration.

### In case of accidental spills:

- Clean up all bleach with a mop or other appropriate cleaning equipment.
- Do not use other chemical products to clean a bleach spill.
- When possible, use rubber gloves to avoid excessive exposure to skin; this can cause irritation.

<u>Sodium Hypochlorite Granules</u>: Sodium hypochlorite used in its pure granulated form (for mixing into solutions of bleach at the work site) is very corrosive and poses certain fire risks because of its oxidizing properties.

- Make sure to read and understand the precautions written on the original containers.
- Keep containers tightly closed when not in use.
- Store in cool, dry area where temperatures do not exceed 125°F (52°C) for 24 hours.
- Vapor space in a closed container may contain chlorine-containing compounds. Avoid inhaling these residual gases.

#### In case of accidental spills:

- Do not add water to spilled granules. Using clean equipment, sweep and scoop all spilled granules and place into a clean, dry container for disposal.
- Do not use floor sweeping compounds to clean up spills.
- When disposing of granulated sodium hypochlorite, do not close disposal containers containing wet or damp material. Hazardous gases could build up.
- Sodium hypochlorite granules are combustible; they must be treated accordingly. Dispose of at a waste disposal site.
- In case of fire, use a water fire extinguisher or hose. Do not use ABC or dry chemical extinguishers as there is the potential for a violent reaction.
- Use rubber gloves when handling granules.

<u>Conclusion</u>: Bleach and granulated chlorinating compounds must be handled responsibly. Read available MSDS on bleach, sodium hypochlorite, and other chlorinating compounds. Always communicate with your fellow workers and when in doubt, talk with your supervisor. Always dispose of chlorinating compounds at the proper waste disposal site.

Employee Attendance:	(Names or signatures of personnel who are attending this meeting)		

Sodium hypochlorite is a common disinfectant and cleaner, but it is corrosive and oxidizing; decomposition may produce dangerous gas.