

**SAFETY TRAINING TOPIC** 



HM-15a-032720 March 27, 2020

### Diluted Sodium Hypochlorite 12.5% (Liquid Pool Shock) as a Disinfectant/Sanitizer

In light of the current COVID-19 outbreak and a potential bleach shortage, the following standards and procedures for the worker cleaning and disinfection of surfaces using a pool shock solution is to be implemented. These standards are equivalent or exceed the Centers for Disease Control (CDC) recommendations

### for using bleach as a cleaner/disinfectant.

Routine cleaning and disinfecting of frequently touched surfaces and objects such as tables, countertops, light switches, doorknobs and the interior of vehicles is everyone's responsibility.

- Discuss the Cleaning Activity to be Performed with all Workers
- Review how to safely prepare a pool shock/water mixture for the disinfection of surfaces at CTDOT facilities.

**Cleaning and Disinfecting Surfaces** – Clean dirty surfaces using soap and water before using a diluted pool shock solution to disinfect or sanitize, if necessary.

### **Diluted Pool Shock Solution Safety and Proper Mixing**

- Check to ensure the product is not past its expiration date.
- Unexpired pool shock will be effective against coronaviruses when properly diluted.
- Follow manufacturer's instructions for application and proper ventilation.
- Never mix pool shock with ammonia or any other cleanser.
- Follow the instructions on the label to ensure safe and effective use of the product.
- Check the Sodium Hypochlorite percentage. It should be 12.5%.
- If it is not 12.5% do not use it or contact the Safety Division.

# **IMPORTANT!** Using more is not always better! Using more is a waste of pool shock which is in very short supply. These mixtures are good for 24 hours. After the 24 hours they start to lose their effectiveness.

Preparation of disinfecting solution with pool shock (12.5% sodium hypochlorite) use the following ratios:

- ¼ cup Pool Shock to 1 Gal of Water
- 1 cup to 4 gallons of water
- 1 ¼ cups to 5 gallons of water.

### Use of Pool Shock Solution for Disinfecting

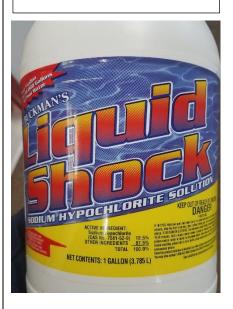
- The pool shock/water solution is to be applied to the surfaces to be sanitized with a spray bottle, and left to sit for at least 5 minutes.
- After the surfaces have been left to sit for 5 minutes, the surfaces may be dried in the usual fashion or left to dry naturally.

CAUTION! DO NOT mix pool shock/sodium hypochlorite with any other cleaning products, or ammonia which will release hazardous gasses into the atmosphere! When mixing the solutions pour the chemical into the water to prevent splash hazards.

### Supplies

As everyone knows cleaning supplies are in short supply nationwide. Please conserve supplies as much as possible however, always try to use the proper shock/water mixing solutions. When additional supplies are needed, work through your chain of command to be resupplied as soon as possible.

ATTENTION Sodium Hypochlorite 12.5% (Pool Shock) We will soon be distributing Sodium Hypochlorite 12.5% to facilities to be diluted and used as a disinfectant.



## How to Dilute Sodium Hypochlorite 12.5% (Liquid Pool Shock) so that it can be used as a Disinfectant or Sanitizer

### Step 1

- Determine how much of a diluted bleach solution you will need. Make only as much as can be used in a 24 hr. period. Diluted bleach loses its effectiveness after 24 hrs. and it is not to be stored overnight.
- Carefully read the label of the bleach container to determine the strength of the bleach, PPE to used and all safety precautions.
- Shock to Water Ratios:
  - ¼ cup Pool Shock to 1 gallons of water.
  - 1 cup Pool Shock to 4 gallons of water
  - 1 ¼ cups Pool Shock to 5 gallons of water.

### Step 2

- Select a CLEAN 1 or 5 Gallon plastic bucket. Clean does not mean new! Plastic buckets are to be well rinsed out and free of any chemicals.
- Place the plastic bucket on the ground in an area that will not be damaged by spillage. Do not fill a 5 gallon bucket on a table or any elevated surface.
- Fill the plastic bucket with clean water up to the ½ way point.
- From of the 1 gallon bleach container, carefully pour the desired amount of bleach into a clean measuring cup.
- Pour the bleach from the measuring cup into the ½ full plastic bucket.
- Finish filling the plastic bucket with clean water.

### Step 3

• Dispense the finished disinfecting bleach solution into smaller containers, such as spray bottles, by dipping the measuring cup into the bleach solution and carefully filling the smaller container.

### Using Cloth Rags or Paper Towels for Disinfecting

- Paper towels or cloth rags may be used in conjunction with the diluted bleach disinfecting solution.
- Be sure to wear protective gloves when using the diluted bleach solution.
- Allow paper towels to dry before disposing of them in the regular trash.
- Cloth rags may be used repeatedly and disposed of in the regular trash once they have dried.
- When cloth rags are used, at the end of the day, they may be rinsed in the diluted bleach solution, rung out, allowed to dry and then used again the following day.
- Cloth rags should be replaced when they become too soiled to be effective.

### Be careful when using any bleach product, splashes can damage clothing.

