

## Special Edition

### Using Bleach as a Disinfectant Cleaner

Because many of the disinfectants listed in [MMO-031-20](#) are either unavailable or in limited supply, bleach can be used as an alternative.

Topeka Material Distribution Center (TMDC) is in the process of procuring bleach for the field to use in the daily completion of MMO-031-20 until the products listed in the MMO become available. TMDC is also obtaining spray bottles to use which must be labelled per Occupational Safety and Health Administration (OSHA) guidelines.

In order to use bleach safely, it is critical to use the following method to dilute the product.

1. Put on goggles and gloves (nitrile or rubber).

<b>CAUTION</b>
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**Always add the water to the container first, and then add the bleach to avoid accidentally splashing.**

2. 5 tablespoons (1/3-cup) bleach per gallon of water, or
3. 4 teaspoons bleach per quart of water.
4. Swirl to mix.
5. Attach sprayer to bottle.
6. Maintain the proper CTC mixing requirements.
7. The bleach is now ready for use.

Wear safety glasses and gloves while using this product. When spraying bleach onto a cleaning **HUCK Towel**, ensure the spray bottle is within three inches of the cleaning material. Do not saturate – use the same methods taught when spraying Custodial Team Cleaning (CTC) chemicals onto cloths. Do not spray bleach within small areas or into the air – it must be a controlled spray onto the cleaning material.

<b>WARNING</b>
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**Do not use microfiber cloths or mops for cleaning with bleach. The bleach will destroy the microfiber and render them useless.**

**Things to keep in mind to safely use bleach as a disinfectant:**

1. Do not mix alcohol with bleach – the combination produces chloroform, which can cause serious health issues.
2. Ensure that secondary labeling on bottles does not conflict with OSHA guidelines.

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*Using Bleach as a Disinfectant Cleaner (continued)*

3. All bottles with the bleach and water mixture **MUST** be properly identified.
4. Use in a ventilated area – it evaporates quickly and creates potentially harmful vapors.
5. Always review the Safety Data Sheet (SDS) before using bleach or any cleaning chemical.
6. Do not use to clean the following surfaces, because it can cause damage:
  - a. Finished surfaces
    - 1) Varnishes or similar finishes
    - 2) Painted, shellacked, lacquered finishes
    - 3) Treated wood
  - b. Certain fabrics – acetate, rayon, wool, silk, microfiber
7. Avoid getting on skin because it can cause irritation – use nitrile gloves to avoid skin contamination.
8. Do not drink it – bleach is toxic if ingested even in small amounts
9. Use disposable cloths if available. Only use as much bleach as required to complete the task (i.e., do not saturate wipes).
10. If using non-disposable **HUCK Towel** materials, let cleaning materials dry thoroughly before bagging for the laundering process.

Sites should contact MTSC Safety with any questions or concerns.

### **Surfaces**

Clean dirty surfaces using a detergent or soap and water prior to disinfection.

For disinfection, diluted household bleach solutions OR alcohol solutions with at least 70% alcohol OR most common EPA-registered household disinfectants should be effective.

1. Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer's instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.
2. Products with [EPA-approved emerging viral pathogens](#) claims are expected to be effective against COVID-19 based on data for harder to kill viruses. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.).
3. For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces. After cleaning:
4. If the items can be laundered, launder items in accordance with the manufacturer's instructions using the warmest appropriate water setting for the items and then dry items completely.
5. Otherwise, use products with the EPA-approved emerging viral pathogens claims (examples [here](#)) that are suitable for porous surfaces.

### **NOTE**

The above information is from the CDC [Environmental Cleaning and Disinfection Recommendations](#).

*HQ Maintenance Operations*

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