

Cleaning and Disinfection Advice during Coronavirus Epidemic using Bleach



Intended Audience

This advice is mainly for small retail businesses, hotels, residential care settings, nurseries, offices, grocery stores, voluntary organisations etc and intended to provide a quick and accessible solution to kill Coronavirus particles on hand-contact surfaces in those scenarios **using bleach**. Care is required in settings such as kitchens where open food is handled because, even when diluted, it has a strong smell that can taint food. In those situations, a food safe disinfectant/antibacterial cleaner that meets BS EN 1276 is recommended along with good cleaning.

How is Covid 19 Spread?

Covid 19 is the name given to the newly discovered coronavirus causing respiratory disease. It is spread mainly from person-to-person through airborne droplets emitted by coughing or sneezing, then breathed in by those nearby. In addition, those infected can pass it on through hand contact or by contaminating surfaces which others touch. Certain strains of Coronaviruses can persist on hard surfaces like glass, metal, or plastic for about 3 days. It can be longer but rare. That is why, as well as keeping a safe distance, it is important to kill those virus particles surviving on surfaces by thorough cleaning and disinfection before other persons come into contact with them. As the disease can be spread by people showing symptoms and those who do not (asymptomatic), it is safest to presume all surfaces touched by hands are contaminated and need cleaning and disinfecting.

What Chemical Agents are effective against Covid 19?

There are a variety of chemicals that are effective against viruses such as alcohol-based products, Quaternary ammonium disinfectants such as sanitizers used in healthcare and food-service sectors and sodium hypochlorite, commonly called **bleach**.

The full list of approved chemicals list can be found on the link below:

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

During this epidemic we recommend bleach for the following reasons:

- Powerful, swiftly breaking down the virus structure.
- Stays effective for up to 24 hours, providing no dirt is present on the surface
- Easy to use
- Commonly available and cheap, providing a cost-effective solution.

Preparing a bleach solution:

- Mix bleach and cold water. The amount depends on the strength of the bleach bought. For household thick bleach¹ a mix of about 50ml per litre of water (1/20) or follow the manufacturer's instructions.
- Alternatively purchase a 'Ready made up' Bleach Spray which lasts for about 6 months. Follow the instructions on the label regarding the contact time: the minimum time it needs to be on the surface to kill the virus.

Essential Equipment:

- Two Super absorbent strong cleaning cloths one for the bleach solution, the other for soapy water
- Plastic bowl or bucket with hot soapy water or separate spray bottle with soapy water
- 2nd bowl with clean water to rinse dirty cloth or use a nearby sink



¹ Thick bleach contains an ingredient to help it cling to surfaces longer

- Spray bottle for bleach solution
- Protective rubber gloves (Nitrile, latex or Marigold type) ensuring no allergy against material used
- Separate Protective clothing or disposable apron



Method

- Put on gloves
- If surface is visibly dirty, clean it first with soapy water. The surface could be a work top, equipment, door handles, credit card machines, car door handles, steering wheel, seat belt, hand brake, keys, delivered outer food packaging or any other commonly touched surfaces in your business.
- Spray bleach solution onto cloth 3-4 times to wet it, pointing nozzle down away from your face to avoid breathing aerosols in.
- Wipe the required surface.
- Leave to dry, only takes a few minutes
- When cloth appears to get dirty, clean it with soapy water or replace with a clean one
- Wipe your gloved hands with the bleached cloth every 15 mins. to kill any virus there.
- When finished, carefully remove gloves not letting the outside touch your skin, throw away any left-over solutions and clean and dry the equipment and wash hands.
- To disinfect money, plastic notes can be wiped with the bleach solution and coins sprayed all over, left for a couple of minutes then rinsed and dried.

Health and Safety Controls for Use of Bleach:

- Check the Label and use according to instructions.
- Keep it away from your eyes, nose and skin because it is corrosive and can irritate
- Use well-fitting rubber gloves of appropriate material for protection against skin irritation and any skin allergy.
- Avoid touching the eyes with them. If bleach gets into the eyes, immediately rinse with water for at least 15 minutes, and consult a doctor.
- Do not use bleach together with other household detergents, especially acid toilet cleaners, because it is less effective and can react to produce dangerous fumes that will make you very ill. If necessary, use detergents first then apply the bleach.

Other Important points to remember when storing and using bleach!

- A bleach and water solution should be mixed daily to preserve its strength as it loses its effectiveness after 24hrs
- Organic (dirty) materials inactivate bleach, therefore clean surfaces first so the bleach is not hindered from working
- Leave the solution on the surface for a minimum of one minute
- Discard any unused mixtures after **24 hours**.
- Bleach can corrode metals, damage painted surfaces and soft furnishings so should only be used on them for short periods or an alternative sought.
- Bleach deteriorates in light, so store it in a cool, dark place, out of the reach of children
- Bleach deteriorates with time so do not over stock and use within 6 months or within manufacturer's expiry date.