FACT SHEET

EOHU Eastern Ontario Health Unit
BSEO Bureau de santé de l'est de l'Ontario

CHOOSING A SANITIZER OR DISINFECTANT

What is the difference between cleaning, sanitization and disinfection?

CLEANING



The physical removal of foreign material (e.g., dust, soil) and organic material (e.g., blood, secretions, excretions, microorganisms). Cleaning physically removes rather than kills microorganisms. It is accomplished with water, detergents and mechanical action.

» ***Detergent***: A synthetic cleansing agent that can emulsify oil and suspend soil. A detergent contains surfactants that do not precipitate in hard water and may also contain protease enzymes.

SANITIZATION



Lowers the number of bacteria that live on a surface to 99.99%, but it doesn't necessarily kill the bacteria that remain. Food contact surfaces and utensils must be washed and rinsed with potable water prior to sanitizing in order to be effective.

» ***Food Contact Sanitizer***: A product used in the food industry to safely achieve chemical sanitization of food contact surfaces and utensils. Health Canada has approved the sale of chlorine compounds (e.g., bleach), peroxide and peroxyacid mixtures, carboxylic acids, quaternary ammonium compounds (QUATs), acid anionic, and iodine compounds for use on food-contact surfaces.

DISINFECTION



The inactivation of disease-producing microorganisms. Disinfection does not destroy bacterial spores. Medical equipment/devices must be cleaned thoroughly before effective disinfection can take place.

» ***Disinfectant***: A product that is used on surfaces or medical equipment/devices which results in disinfection of the equipment/device. Disinfectants are applied only to inanimate objects. Some products combine a cleaner with a disinfectant.

When choosing a sanitizer or disinfectant, it is important to read the product label. Your choice will greatly depend on the intended use of the product.

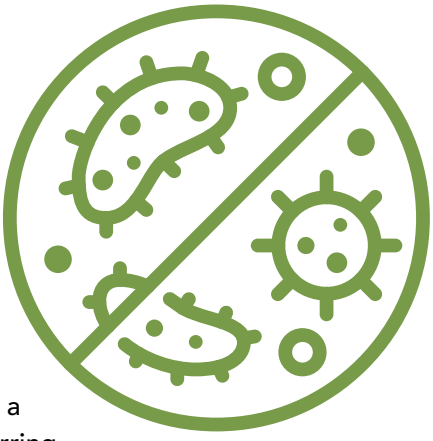
PRODUCT INFORMATION

- The product's name and the manufacturer's name, location and contact information. If this information is not on the label do not purchase the product.
- Product labels specify the intended/appropriate use of the disinfectant or sanitizer and should be read thoroughly prior to use.

DRUG IDENTIFICATION NUMBER (DIN)

- Disinfectants must have a drug identification number (DIN). A DIN is an eight digit number assigned by Health Canada that permits the manufacturer to market the product in Canada. Health Canada looks at the testing, chemistry and safety data and approves the label wording, product name, active ingredients and kill claims. **Not all disinfectants are appropriate for use on food contact surfaces as toxic residues may be left behind**.
- Food contact sanitizers are regulated by the Bureau of Chemical Safety (BCS), Food Directorate, and Health Canada. The BCS determines the maximum residue levels that remain on food products after use and, if acceptable, the Canadian Food Inspection Agency (CFIA) issues a No Objection Letter for these products. **Only food contact sanitizers that have disinfectant claims (such as bactericidal, virucidal) require a DIN**.
- The only exception to this is Chlorine bleach, which can be diluted with water to be used as a sanitizer or disinfectant depending on the intended use.

RELEVANT KILL CLAIMS



- Disinfectants provide kill claims on the label. The product you choose should be effective against the most common germs that spread illness in your facility. Some germs are harder to kill than others.
- Ensure that your disinfectant label has a claim that it will kill Norovirus (or "Norwalk-like viruses" or "feline calicivirus"), the most common cause of vomiting & diarrhea outbreaks.
- Some facilities will choose to switch to a disinfectant with a Norovirus Kill Claim during an outbreak; however it is best practice to always use a product that will kill Norovirus and reduce the risk of an outbreak occurring.

CONTACT TIME

- Contact time is the length of time surfaces and equipment must remain wet with the disinfectant or sanitizer to achieve claims made on the product label. A product with a shorter contact time decreases the time that the surface must remain wet. Contact times can range from one minute to 30+ minutes. Choose a product that has an appropriate contact time for its intended use. For example, is it realistic to use a disinfectant that requires 10 minutes wet contact time on a diaper change table in a busy child care centre? If not, choose a disinfectant with similar kill claims and a shorter contact time.

EXPIRY DATE AND STORAGE REQUIREMENTS

- Products should have an expiry date. After the expiry date, the product may not be effective.
- Keep disinfectants and sanitizers in original containers with expiry dates on the label.
- If the product requires mixing with water, mix a fresh solution daily or keep records of when the solution must be discarded according to the manufacturer's instruction.

TEST STRIPS

- Test strips are used to determine whether effective concentrations of the active ingredients are present in the disinfectant or sanitizer. If products are dispensed or mixed, a test strip will tell you if the solution has the correct concentration. Test strips are required for all products being used on food contact surfaces and utensils.
- Test strips are not intended to be used to extend the use of a chemical solution beyond its expiry date.

MIXING DIRECTIONS

- Always follow the mixing directions indicated on the label. You cannot determine by smell, colour or looking at the product if you have mixed it to the proper concentration.
- All products have a concentration that maximizes their ability to disinfect or sanitize. Using higher concentrations does not mean the product will work quicker or more effectively. In fact, it can increase the likelihood of injury or damage to surfaces and equipment and may be toxic. If too little is used, the product will not be effective.
- Provide a proper measuring tool to measure the chemicals consistently and at the proper concentration.
- Pre-mixed or "ready-to-use" products can be used directly from the container.
- Never mix detergents, sanitizers and disinfectants together. Not only can doing this decrease the effectiveness of your chemical product, but it can also cause potentially harmful health effects to the user.



It is best practice to use non-aerosolizing or non-"spray" type applicators. Using spray type nozzles may contaminate food or cause respiratory illnesses in people.

FIRST AID AND PRECAUTIONARY STATEMENTS

- Read the label to determine which first aid measures to follow in case of accidental exposure or ingestion. Appropriate personal protective equipment (i.e., gloves, gowns, eye protection and masks) are to be provided when using any chemical product.

OTHER CONSIDERATIONS

- When choosing a disinfectant or sanitizer, think about ease of storage and use, staff tolerance, safety, and cost-effectiveness.

SAFETY DATA SHEETS

- Safety Data Sheets (SDS) formerly called Material Safety Data Sheets (MSDS), are information sheets distributed by product manufacturers, that list the ingredients, health and safety requirements (i.e., what personal protective equipment is required when using a chemical) and first aid measures for the chemical. It is a Ministry of Labour requirement to have an on-site copy of the SDS sheets for all chemicals being used in the workplace.

For more information

Food_Contact_Surface_Sanitizers_Aug_2011.pdf (ncceh.ca)

PIDAC: Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings, 3rd Edition 1st revision: November 2025 (publichealthontario.ca)