

## FOOD



Bacoban food protection in compliance with European Standards: Regulation (EC) No 1935/2004 of the European parliament, on materials and articles intended to come into contact with food.

Bacoban is “The New Way of Disinfection” for the food hygiene standards. Namely, Industrial food preparation, Commercial food handling in supermarket (IGA etc.), restaurants, bars, fast food outlets, cinemas and kitchens etc.

Our Vaporiser, mechanical, dry, certified 10-day disinfection

While **conventional surface disinfectants are effective for only 30 minutes after the solution has evaporated, Bacoban’s patented formula offers long-term surface disinfection that kills micro-organisms within minutes of the application and continues to work for up to 10-day**, allowing business owners, managers, chefs or kitchen managers to have hygiene control for the storage, preparation, display or service of food.

Cleaning and disinfection to eliminate the risk of food borne viruses including Norovirus and Hepatitis A and bacteria like E-coli and Salmonella.

Bacoban is effective against a wide range of bacteria, viruses, and fungi. (See full table)

### Food Safety:

- Access to sufficient amounts of safe and nutritious food is key to sustaining life and promoting good health.
- Unsafe food containing harmful bacteria, viruses, parasites or chemical substances, causes more than 200 diseases – ranging from diarrhoea to cancers.

- An estimated 600 million – almost 1 in 10 people in the world – fall ill after eating contaminated food and 420 000 die every year, resulting in the loss of 33 million healthy life years (DALYs).
- US\$110 billion is lost each year in productivity and medical expenses resulting from unsafe food in low- and middle-income countries.
- Children under 5 years of age carry 40% of the foodborne disease burden, with 125 000 deaths every year.
- Diarrhoeal diseases are the most common illnesses resulting from the consumption of contaminated food, causing 550 million people to fall ill and 230 000 deaths every year.
- Food safety, nutrition and food security are inextricably linked. Unsafe food creates a vicious cycle of disease and malnutrition, particularly affecting infants, young children, elderly and the sick.
- Foodborne diseases impede socioeconomic development by straining health care systems, and harming national economies, tourism and trade.
- Food supply chains now cross multiple national borders. Good collaboration between governments, producers and consumers helps ensure food safety.

Read more: <https://www.who.int/news-room/fact-sheets/detail/food-safety>

Biological **contamination** is the leading cause of **foodborne** illness and **food poisoning**\*, and a common cause of **food** spoilage and **food** waste. There are six types of microorganisms that can cause **foodborne** illness: bacteria, viruses, parasites, protozoa (single cell parasites), fungi and prions.

## Disinfectants and sanitizers for use on food contact surfaces

### Summary

- Health Canada has approved the sale of disinfectants for food premises which contain chlorine compounds (e.g., bleach), peroxide and peroxyacid mixtures, carboxylic acids, quaternary ammonium compounds, acid anionic, and iodine compounds for use on food-contact surfaces.
- Disinfectants for use in food premises must have a drug identification number (DIN) and meet criteria, including those regarding antimicrobial efficacy, stipulated in the Health Canada document Guidance Document: Disinfectant Drugs. Products are evaluated by the Therapeutic Products Directorate (TPD) of Health Canada. Not all disinfectants are appropriate for use on food contact surfaces (e.g., toxic residues may be left). Product

labels specify the intended/appropriate use of the disinfectant and should be read before use.

- *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.

Bacoban disinfectants are compliant with European Standards: Regulation (EC) No 1935/2004 of the European parliament, on materials and articles intended to come into contact with food.

Bacoban cleaner/disinfectant “with residual effect” certified up to 10-day offers added protection for food hygiene standards in restaurants, bars, fast food outlets, cinemas and kitchens.

Bacoban’s ready-to-use anti-pathogen formula has been certified according to EU directives for Food Stuffs, Consumer Goods and the Animal Feed Code to provide effective disinfection of surfaces across a wide range of food preparation facilities and is suitable any type of food business that needs high-level hygienic performance.

While conventional surface disinfectants are effective for minutes after the solution has evaporated, Bacoban’s patented formula offers long-term surface disinfection that kills microorganisms within minutes (fast acting) of applications and continues to work for up to 10-day, allowing business owners, shift leaders, chef or kitchen managers to have hygiene control for the storage, preparation, display or service of food.

- Broad base certified disinfection against cross-contamination on kitchen and food handling surfaces.
- Cleaning and disinfection against the risk of foodborne viruses including Norovirus and Hepatitis A and bacteria like E-coli and Salmonella.
- Cleaning and disinfection for shared fridges, freezers and other equipment.
- Bacoban is effective against a wide range of bacteria, viruses and fungi.
- Important considerations when choosing a sanitizer for food contact surfaces includes effectiveness at reducing microbial contamination in specific conditions, cost, ease of application, **need for rinsing**, toxic/irritating properties, and compatibility with locally available water.

- For sanitizers to be effective, proper cleaning and rinsing must be completed before sanitizers are applied.
- Products such as tea tree oil, baking soda, vinegar, electrolyzed water, microfibre cloths, ozone, and silver compounds are not registered disinfectants for food premises, according to the Health Canada definition.

### **Important**

SARS-CoV-2 is the coronavirus responsible for COVID-19 illnesses. Current evidence shows that the primary modes of transmission are via respiratory droplets when an infected individual coughs or sneezes, and close contact with an infected individual. Respiratory droplets may also contaminate surfaces (fomites) such as door handles, light switches, chairs, or faucets. Evidence on whether airborne and fecal transmission are potential pathways is still evolving. Some evidence of disease transmission by asymptomatic individuals is also emerging. Research evidence to date has shown that the virus can remain stable on surfaces ranging from several hours to several days, depending on the material of the surface.

### **In fact, up to 28 days:**

<https://www.theguardian.com/world/2020/oct/12/virus-that-causes-covid-19-can-survive-up-to-28-days-on-surfaces-scientists-find>

### **SARS-CoV-2 on surfaces**

Fomites include both hard non-porous surfaces and soft porous surfaces. Hard surfaces, such as door handles, chairs, light switches, and countertops, become contaminated through contact with soiled hands or contact with respiratory droplets expelled by ill individuals. While knowledge about this emerging pathogen is continuously evolving, the most recent research evidence demonstrated that SARS-CoV-2 is able to survive on copper for up to four hours, up to 24 hours on cardboard, **and up to two to three days on plastic and stainless steel**. The viability of the virus to remain on a variety of surfaces supports the importance of frequent cleaning and disinfection, proper etiquette such as sneezing and coughing into elbows, and robust hand hygiene practices among other non-pharmaceutical interventions to prevent disease transmission.

There is currently no evidence to show that viral transmission is possible by eating contaminated food. However, as any fomite (such as food packaging) may potentially become contaminated, it is prudent to practice proper hand hygiene after handling groceries and food delivery items. Staff in food premises should practice appropriate hand hygiene with soap and

water for 20-30 seconds, or alcohol-based hand sanitizer. However, staff directly involved in food preparation should only use soap and water.

### **Cleaners, Sanitizers, and Disinfectants**

Food contact surfaces are defined as any equipment or utensil that comes into contact with food products, or with other surfaces that come into contact with food products. Environmental surfaces refer to all other non-food contact surfaces in a food production operation. As the toxicological risks differ between products used on food contact versus on environmental surfaces, the testing standards and processes used in regulating and approving products also differ.

The types of products used in cleaning and sanitation programs in food premises can be distinguished by their intended use and ability to kill microorganisms:

- *Cleaners* are detergents or abrasive cleaners that physically or chemically remove dirt, dust, organic materials, and microorganisms. As debris such as dirt or organic materials may reduce the effectiveness of disinfectants, cleaners are important in the cleaning and sanitation program of food production facilities.
- Sanitizers reduce, but not necessarily eliminate microorganisms on surfaces. In food production facilities, *special food contact sanitizers with disinfectant claims* are used on food contact surfaces. These products must reduce microbial contamination by 99.999% or 5 log in 30 seconds. Some products may need to be rinsed off with potable water; manufacturer's instructions must be followed and verified to be safe on food contact surfaces as needed.
- *Non-food contact sanitizers* used on environmental (non-food contact) surfaces must reduce microbial contamination by at least 99.9% or 3 log within 5 minutes at room temperature.
- *Disinfectant* products include bactericide, fungicides, virucides, mycobactericides, tuberculocides, sporicides, and sterilants. These products have a greater ability to eliminate microorganisms and are categorized into low, intermediate, and high depending on their intended use and efficacy against different types of microorganisms. To disinfect environmental surfaces potentially contaminated with SARS-CoV-2, the disinfectant product must be approved for such use in food premises. The manufacturer instructions, including concentrations and contact time, must also be followed to ensure its effectiveness.

## **Cleaning and sanitation program in food premises**

In Canada, a cleaning and sanitation program in food premises includes identifying areas, equipment, utensils, and surfaces that require cleaning and sanitizing/disinfecting, the frequency and procedures of cleaning and sanitizing/disinfection, and the types of products used for cleaning and sanitizing/disinfecting.

Food premise operators should review their existing cleaning and sanitation programs to identify areas where increased frequency of sanitizing and disinfection is warranted, and whether the disinfectants used have been approved for use against SARS-CoV-2. The BC Centre for Disease Control recommends regularly cleaning and sanitizing all food contact surfaces such as food prep tables, kitchens, and packaging areas. Customer service areas exposed to the public should also be cleaned and disinfected, and non-food contact high-touch surfaces such as hand-held POS devices, menus, chairs, bathrooms, and doorknobs should be disinfected with an approved disinfectant product.

Household bleach is considered a disinfectant if used at 1000 to 5000 ppm solution with 10-minute contact time. As SARS-CoV-2 is an enveloped virus, it can be inactivated with a 500-1000 ppm bleach solution, while pathogens such as norovirus may require 5000 ppm bleach solution to be inactivated.

This online chlorine calculator is useful to calculate the appropriate amount of bleach to add to a certain amount of water to achieve desired concentration solution. **Never mix disinfectant products** as this may result in toxic by-products that may be dangerous to the user. When bleach is mixed with ammonia (found in some glass and window cleaners, interior and exterior paints, and urine), chloramine gases are produced. Symptoms of chloramine gas exposure include coughing, shortness of breath, chest pain, and nausea. Mixing bleach with acids (found in vinegar, some toilet bowl cleaners, drain cleaners, and dishwasher detergents) produces chlorine gas. Chlorine gas is an irritant even at low levels and causes coughing, breathing problems, burning and watery eyes, and a runny nose. When chlorine gas is combined with water, hydrochloric acid is produced, which causes burns to the skin, eyes, nose, throat, mouth, and lungs.

## **Approved Sanitizers and Disinfectants used against SARS-CoV-2**

Health Canada uses stringent safety, efficacy, quality, and labelling regulations and standards to approve disinfectant products for sale in Canada. Sanitizers without disinfectant claims are not regulated through the same channels.

Approved disinfectant products must have a Drug Identification Number (DIN). In response to COVID-19, Health Canada is implementing interim measures to address potential disinfectant

product shortages and to ensure Canadians can access disinfectant products that can be used against SARS-CoV-2:

- Facilitate expedited access to disinfectants through special approval for the sale of products that may not be fully compliant with labelling requirements, or that are not authorized for sale in Canada but are authorized or registered in other jurisdictions with similar regulatory frameworks and quality assurances as Canada. The list of disinfectant products approved under the interim measures can be found on the Health Canada website.
- Provide a regularly updated list of hand sanitizer and disinfectant products approved against SARS-CoV-2. Practitioners and consumers are advised to check products using this list to ensure that they are approved for use against this emerging pathogen.

### **Contact us for more information**

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