



March 26, 2020

Dear Recipient,

COVID-19 (coronavirus) continues to spread across the world and new cases of infection and reports of fatalities attributed to this specific virus are increasing. Our customers may contact you with questions regarding best practices to mitigate the spread of this virus or the spread of other disease as well. Our customers should be advised that while there is currently no cure for this disease, there are steps that they can establish on board to reduce the risk of contracting diseases, including COVID-19. Best practices, when established as part of a daily cleaning regimen, will further mitigate transmission of disease. The recommended course of action to prevent the spread of communicable diseases includes taking a proactive approach to ensure a high level of personal hygiene, as well as thoroughly cleaning and disinfecting one's living and work areas. Below you will find best practices, taken from global health agencies, that can be used when discussing vessel and crew related health concerns with your customers.

Avoidance

Avoid coming in close contact with someone who may be sick. Stay in cabin or in isolation if you are unwell. Avoid touching surfaces which may not be clean or properly disinfected. Immediately wash hands with soap and warm water after being in contact with someone who is sick or after touching a possibly contaminated surface. Do not touch your eyes, nose, or mouth unless your hands have been thoroughly cleaned. Wash hands after touching eyes, nose, and mouth or contacting any other bodily fluid.

Cover Your Coughs and Sneezes

Cover your coughs and sneezes with a tissue to prevent fluid droplets, that are being expelled from your body, from landing on surfaces. Dispose of used tissues in a lined trash can. Immediately wash hands with soap and warm water, adhering to proper handwashing guidelines, shown below.

Proper Handwashing Techniques

Following these 5 steps during handwashing can effectively prevent the spread of germs.

Step 1 Wet hands with clean running water and apply soap.

Step 2 Lather hands by rubbing together making sure to get the backs of hands, between fingers, and under fingernails.

Step 3 Scrub hands for a minimum of 20 seconds.

Step 4 Rinse hands thoroughly under clean running water.

Step 5 Dry hands using a clean towel or allow to air-dry.

Frequent Handwashing

Washing hands often, with soap and water, is the best way to remove germs from one's hands. Washing hands with soap and water can reduce the risk of an individual becoming infected and will also stop the spread of bacteria to other surfaces. Using soap and water is the preferred method for handwashing as the surfactants in soap will aid in the removal of any dirt on the hands. Dirt on the hands can trap germs against the skin. For complete hand-hygiene, soap and water must be used when hands are visibly dirty. Alcohol-based hand rubs, containing at least 60 percent alcohol, can be used when soap and water is not available but may not be as effective. For more information on handwashing, please refer to the US



Centers for Disease Control and Prevention's site [When and How to Wash Your Hands](https://www.cdc.gov/handwashing/when-how-handwashing.html) <https://www.cdc.gov/handwashing/when-how-handwashing.html>. CREW CARE Food Handlers Hand Soap (PCN 1AB3459) is an ideal soap for handwashing, as it contains surfactants and a mild sanitizer to further safeguard against the spread of certain types of bacteria. Consider making handwashing or sanitizing stations available to visitors upon entry to a ship.

Clean and Disinfect

Clean and disinfect all touchpoints daily as part of a complete cleaning program for your living and working environments. Disinfectants work best on thoroughly cleaned surfaces and when they are applied following manufacturer recommendations, including specified wet-contact time. This allows the disinfectant to contact the entire surface area while providing ample time for its chemistry to take effect. Visibly dirty hard surfaces should first be cleaned with either CREW CARE Surface & Glass Cleaner (PCN 1AB3450) or with CREW CARE Tough Job Cleaner (PCN 1AB3451) followed by disinfecting with CREW CARE Neutral Cleaner Disinfectant (PCN 1AB3452). For surfaces that are not visibly dirty but require disinfecting, CREW CARE Neutral Cleaner Disinfectant can be used as a one-step cleaner and disinfectant. The disinfectant must be used in accordance with instructions on its label. **CREW CARE Neutral Cleaner Disinfectant has been registered under the United States Environmental Protection Agency's (U.S. EPA) Emerging Viral Pathogen Guidance, activated in response to the current coronavirus outbreak, for use against Novel Coronavirus SARS-CoV-2, the cause of COVID-19.**

Laundering of Linens

The frequent laundering of clothing and linens, including all work uniforms, personal clothing items, bedding, and towels, is recommended as germs can be present on these items as well. Clothing and linens of the unwell should be washed separately from that of those who are not ill. CREW CARE TNW Laundry Detergent (PCN 1AB4571) can be used in all top or front load type laundry machines, including high-efficiency units, for all laundering needs on board vessels.

Post Port Call Cleaning and Disinfecting

A Post Port Call Program for Cleaning and Disinfecting a ship, by its crew, is recommended to clean and disinfect critical touchpoints after all shoreside personnel have gone ashore and in cases where an illness was present. Crewmembers should work with their EH&S department to design vessel-specific post port call cleaning and disinfecting programs. Critical touchpoints are areas that are frequently touched by multiple persons, and include door handles and push plates, handrails, elevator buttons, taps, keyboards, light switches, countertops, desks, chairs, and shared sanitary facilities. A thorough cleaning and disinfecting of living spaces and common areas should be carried out at regular intervals. Additional cleaning and disinfecting should be done after leaving port to help ensure that diseases, such as COVID-19, are not contracted by crew and subsequently transported along the vessel's trade route.

For our customers living on board, CREW CARE products can assist in maintaining a safer environment. The above recommended practices can easily be made part of one's daily routine in the effort to curtail the spread of disease. Basic personal hygiene coupled with effective cleaning and disinfecting methods is the easiest way to maintain healthy, disease-free, living conditions, both on board vessels and in shoreside operations. The products available in Drew Marine's CREW CARE Accommodation Cleaning Program are the tools you can offer your customers to help them combat the spread of disease throughout their fleet. Again, Drew Marine's CREW CARE Neutral Cleaner Disinfectant kills 99.99% of all bacteria, in addition to previously known forms of human coronaviruses, on all hard, non-porous, surfaces when used as directed. The most effective way to protect against COVID-19 and other



communicable diseases is to prevent their spread. Best practices, including proper hygiene and proper cleaning and disinfecting of living and working spaces, will aid in preventing the spread of disease. Crewmembers should notify healthcare professionals immediately when cases of infection are suspected and seek expert care. Always adhere to policies set forth by the local governing body pursuant to the country you are in.

Following up on the recent communication you received regarding CREW CARE Neutral Cleaner Disinfectant and its efficacy against SARS-CoV-2, the cause of COVID-19, I would like to clarify the directions for this product's use against novel coronavirus. The length of time CREW CARE Neutral Cleaner Disinfectant should remain in contact with a hard surface varies and is dependent upon the type of pathogens suspected to be present. The label on CREW CARE Neutral Cleaner Disinfectant half-gallon containers gives contact times for several specific, previously known, and well-researched, pathogens. Among those pathogens listed on the label is "Human Coronavirus", and the suggested wet-contact time for this pathogen is 1 minute. **At this time, the statement on the label applies only to human coronaviruses that were identified prior to the outbreak of the novel coronavirus, SARS-CoV-2, the cause of COVID-19.**

The United States Environmental Protection Agency's (EPA) latest list of products that meet EPA's criteria for use against SARS-CoV-2, the novel coronavirus that causes the disease COVID-19, indicates the wet surface-contact time for CREW CARE Neutral Cleaner Disinfectant, EPA registration number 47371-129-56473, is **10 minutes. The contact time of 10 minutes, when using CREW CARE Neutral Cleaner Disinfectant against SARS-CoV-2, will remain in effect until further notice.** When speaking with customers about CREW CARE Neutral Cleaner Disinfectant's efficacy against this novel coronavirus, SARS-CoV-2, please advise them of the **10 minute** contact time for this product when used against this particular novel coronavirus.

Due to the fluidity of this situation, the information we have regarding SARS-CoV-2 and COVID-19 is constantly being updated and we will continue sharing details from the US CDC and US EPA. Please contact me directly with any questions.

- **EPA Update Requires Dosage Rates for ALL List-N Products to Be Consistent with Claims Against Harder-To-Kill Viruses**
- **Follow Procedure Below Carefully to Achieve Newly Required Concentration of CREW CARE Neutral Cleaner Disinfectant for Use Against SARS-CoV-2**

As I mentioned in my previous bulletin, the management of SARS-CoV-2, the cause of COVID-19, is an emerging, rapidly evolving situation. As the latest information is communicated from the authorities, we advised you we would provide you with those updates as they develop: The United States Environmental Protection Agency's (US EPA) List N, which includes products that meet the EPA's criteria for use against SARS-CoV-2, the novel coronavirus that causes the disease COVID-19, is continually being updated as new information regarding SARS-CoV-2 is analyzed. As previously mentioned, CREW CARE Neutral Cleaner Disinfectant (US EPA registration number 47371-129-



56473) is among the disinfectants which can make Emerging Viral Pathogen claims for use against SARS-CoV-2 AND against Human Coronavirus.

According to the US EPA, the National Institute of Allergy and Infectious Diseases defines emerging infectious diseases/pathogens as those “that have newly appeared in a population or have existed but are rapidly increasing in incidence or geographic range.” Many of the emerging pathogens of greatest concern are pathogenic viruses, and the ability of some of these viruses to persist on environmental surfaces can play a role in human disease transmission. SARS-CoV-2, the cause of COVID-19, is such a pathogenic virus. Because the occurrence of emerging viral pathogens is less common and predictable than established pathogens, few if any US EPA-registered disinfectant product labels specify use against this category of infectious agents. Therefore, in 2016, EPA provided a voluntary, two-stage process to enable use of certain US EPA-registered disinfectant products against emerging viral pathogens not identified on the product label. A company, such as the primary registrant, can apply for an emerging viral pathogens claim, based on previous EPA-approved **claims for harder-to-kill viruses**. The emerging viral pathogen guidance was triggered for SARS-CoV-2 on January 29, 2020. EPA reviews the supporting information and determines if the claim is acceptable. These registrations are included on the previously mentioned EPA List N. Once approved, a company can make certain off-label claims as specified in the EPA policy in the event of an outbreak, such as SARS-CoV-2.

Because SARS-CoV-2 is an emerging viral pathogen, in accordance with EPA emerging viral pathogen guidance, the primary registrant for our disinfectant has just recently issued the following rule concerning our EPA registered product:

COVID-19 is caused by SARS-CoV-2. CREW CARE Neutral Cleaner Disinfectant kills similar viruses and therefore can be used against SARS-CoV-2 when used in accordance with the directions for use against Adenovirus type 7 on hard, non-porous surfaces.

NOTE: Adenovirus type 7 is indeed a “harder-to-kill virus”, and the dosage rate of CREW CARE Neutral Cleaner Disinfectant required to kill Adenovirus type 7 is higher than the rate provided when the product is dosed from its concentrate container via the dispensing unit into ready to use spray bottles or buckets for use against the other pathogens listed on its label.

The dosage rate required to kill Adenovirus type 7 is **16ML per Liter**, and the wet contact time on hard, non-porous surfaces being **disinfected is 10 minutes**.

To achieve the required dosage rate for CREW CARE Neutral Cleaner Disinfectant that is effective against SARS-CoV-2, an additional amount of concentrate must be added to the ready-to-use (RTU) bottles and buckets over what is supplied through normal dispensing. The chemical management system that is part of the CREW CARE Accommodation Cleaning Program consists of concentrated chemicals in specialized containers which must be mated to a CREW CARE Dispenser to allow for the diluted chemical to flow out. Unfortunately, this typically useful closed system creates a challenge for the user when trying to access the additional amount of concentrate required to increase the dosage of CREW CARE Neutral Cleaner Disinfectant to the specified rate for use against SARS-CoV-2. However, the increased dosage is required against this new virus, SARS-CoV-2. Therefore, in these



circumstances only, and for our customers' health and safety, the following steps are recommended and should be communicated to our customers for preparing CREW CARE Neutral Cleaner Disinfectant for use against SARS-CoV-2:

Step 1- Identify and wear appropriate personal protective equipment (PPE). Refer to the product SDS.

Step 2- At the top of a CREW CARE Neutral Cleaner Disinfectant concentrate container, puncture a small hole in the container above the liquid level to pour out concentrate. Make a second small hole at the top of container, on the opposite side, for venting air. **DO NOT** use the container in the dispenser once it has been punctured. Recap and set aside for future use when disinfecting surfaces against SARS-CoV-2.

Step 3- Pour concentrate into a clean container marked for measuring liquid.

Step 4- Fill ready to use (RTU) bottle or bucket with water.

Step 5- Add CREW CARE Neutral Cleaner Disinfectant concentrate at a ratio of **16ML per Liter** to RTU bottle or bucket of water.

Step 6- Clean up any spills that may have occurred during the filling process and safely store remaining concentrate for future use.

Please ensure those of our customers using CREW CARE Neutral Cleaner Disinfectant are advised of the 10-minute wet contact time and the increased dosage requirement for SARS-CoV-2, as the dosage rate is not listed on our product label. Aside from the increased dosage rate against SARS-CoV-2, the dilution rate via our dispensing system for the multiple pathogens listed on our PDS and product label remains the same. SARS-CoV-2 is an unusual circumstance, and the instructions in this bulletin only apply when disinfecting surfaces against this novel virus. These instructions are an interim measure for SARS-CoV-2. We are investigating an alternative solution for this virus, such as offering ready to use product.

Best Regards,

Drew Marine