

CaviWipes[™] 2.0: Infection prevention for the new generation of pathogens



Today's healthcare environments are faced with emerging and unpredictable pathogens, making infection control challenging. These pathogens exist on critical care surfaces ranging from inroom patient beds to IV pumps in hallways to light switches in the sterile processing department.

According to the U.S. Centers for Disease Control (CDC), approximately 1.7 million patients acquire healthcare-associated infections every year while hospitalized for unrelated health conditions, and more than 98,000 of those patients die due to those healthcare-associated infections.¹ Proper surface disinfection is key to limiting the spread of highly contagious healthcare-associated infections. The infection prevention practices used to prevent cross-contamination between surfaces are essential in healthcare settings to ensure infection prevention.

For 30 years, the healthcare community has used Metrex products every day to help prevent infections. Now CaviWipes 2.0 from Metrex is helping to set surface disinfection standards for infection prevention.

What is CaviWipes 2.0?

CaviWipes 2.0 is a one-step broad-spectrum disinfectant wipe for use in cleaning and

disinfecting hard, non-porous, inanimate surfaces and non-critical instruments in hospitals, laboratories and other critical care areas. Effective against 42 pathogens, including SARS-CoV-2 that causes COVID-19 infections, CaviWipes 2.0 helps reduce the risk of cross-contamination in healthcare facilities quickly and efficiently – all while addressing common challenges of material compatibility.

Meeting today's and tomorrow's infection prevention needs

During the COVID-19 pandemic, front-line workers have quickly pivoted their focus as necessary, adopting new practices and using new tools to keep employees and patients safe from harm. As the industry continues to manage the exponential influx of patient traffic, Metrex has worked quickly to respond to changing needs and the challenges stemming from the fight against healthcareassociated infections.

CaviWipes 2.0 uses innovative formulations to deliver faster contact times, stronger efficacy for a broad spectrum of pathogens and is easy to use on a wide variety of surfaces. These qualities are also why CaviWipes 2.0 meets some of the CDC's recommendations for ideal disinfectant properties.²

The CDC recommendations also align with additional CaviWipes 2.0 features, including:

- Rapid-acting kill times
- Good cleaning properties
- Easy-to-use, clear label
- Broad spectrum
- Stability

Efficacy against emerging viral pathogens, including SARS CoV-2

CaviWipes 2.0 qualifies for the U.S. Environmental Protection Agency's (EPA) Emerging Viral Pathogen claim for all virus types (enveloped, large and small non-enveloped viruses).³

Emerging viral pathogens like SARS-CoV-2 are those "that have newly appeared in a population or have existed but are rapidly increasing in incidence or geographic range." In order to qualify for the Emerging Viral Pathogen claim against all virus tiers, a disinfectant must be an EPA-registered surface disinfectant and kill at least two different types of small non-enveloped viruses — those that are difficult to kill. This claim was created for disinfectant product companies to make certain off-label efficacy claims for new and emerging viruses to meet current and future daily infection prevention needs and unpredictable public health crises such as the SARS-CoV-2 pandemic.

CaviWipes 2.0 is also on the EPA's List N as a surface disinfectant to kill SARS-CoV-2 when used according to label directions.⁴

With Metrex's EPA approval to claim efficacy against SARS CoV-2 with CaviWipes 2.0 healthcare workers can have the cleaning and disinfecting tools and confidence they need to protect patients and themselves against emerging viral pathogens.

Killing pathogens quickly and efficiently

CaviWipes 2.0 elevates the tried-and-true original CaviWipes to next-level cleaning and disinfection with a new generation of active ingredients. CaviWipes 2.0 creates synergy between a quaternary ammonium compound with low alcohol⁵ to achieve effective surface disinfection while maintaining material integrity, it features:

1-step disinfectant cleaner

CaviWipes 2.0 is a 1-step infection prevention solution, effective against pathogens in the

presence of a 5% blood soil condition. This eliminates the need for a pre-cleaning step,* which would require an additional wipe, and makes CaviWipes 2.0 an effective surface cleaning and disinfecting product. One-step cleaning and disinfecting can also facilitate faster turnover and greater compliance.⁶

2-MINUTE UNIVERSAL CONTACT TIME

A surface disinfectant must stay visibly wet on the surface for the contact time specified in the label direction to ensure efficacy. Contact times can range from 30 seconds to ten minutes, depending on the product.

Surface disinfectants with longer contact times can become a constraint for healthcare workers who are typically tasked with disinfecting patient care rooms within a 40-to-45-minute turnaround window. Moreover, long contact times may increase the chance that proper surface disinfection protocols will be sacrificed for the sake of urgency.

CaviWipes 2.0 cleans and disinfects against bacteria, viruses and pathogenic fungi with a 2-minute universal contact time. This makes CaviWipes 2.0 an effective disinfectant and enables the wipe to be a 1-step cleaning and disinfecting tool.

EFFECTIVE AGAINST 42 PATHOGENS

Built off the chemistry of the legacy product, CaviWipes, CaviWipes 2.0 optimizes the efficacy needs of today's ever-changing healthcare environment and is effective against 42 pathogens, including commonly found multi-drug resistant organisms as well as SARS-CoV-2**, Norovirus***, Candida Auris, Mycobacterium bovis (TB), Methicillin-Resistant Staphylococcus aureus (MRSA) and Human Immunodeficiency Virus Type 1 (HIV-1) **.

"When choosing a surface disinfectant product, one with a broad-spectrum of activity against clinically relevant organisms is the more important factor in my decision. An infection preventionist's job is to keep patients and staff safe, and CaviWipes 2.0 helps them do just that," said Sharon Ward-Fore, MS, MT (ASCP), CIC.

EASY-TO-USE LABEL

Users can quickly and easily find critical information on efficacy, recommended surfaces and more on the label, including categorized and alphabetized organisms claim on the front, clear contact time on the front and back, and a table to more easily identify use sites.

Material compatibility testing with CaviWipes 2.0

Material degradation can be severely exacerbated by disinfectants, making them incompatible. When incompatible ingredients are used to disinfect or clean healthcare equipment and surfaces, it can result in costly defects, damage and failures like cracks and fissures that hide dangerous pathogens.

To successfully create an effective surface disinfectant that meets infection prevention needs while maintaining equipment integrity, Metrex conducted rigorous research, development and real-case user testing⁸ on the new CaviWipes 2.0 formulation. The testing assessed the liquid formula's impact on various plastic, metal and fabric materials commonly found in healthcare settings.

Metrex designed the CaviWipes 2.0 disinfectant formulation to make it even more effective against a broader pathogen pool and faster acting compared to CaviWipes, all while still minimizing damage to common healthcare surfaces with prolonged and repeated exposure.

Like the original formulation, CaviWipes 2.0 is compatible with and safe on a wide variety of hard, non-porous, high-touch surfaces that patients often contact, including plastics and metals. CaviWipes 2.0 also has the right combination of ingredients and a neutral pH, achieved with a proprietary low alcohol and quaternary ammonium formula, formulating a neutral pH of 7.5, making it gentle on materials and surfaces.

Because no single cleaner or disinfectant is compatible with every material, Metrex created an easy-to-read label for healthcare professionals to determine the wipes' surface compatibility quickly.

The challenge of material compatibility and all its complexities will require not just a next-generation surface disinfectant but a collaborative solution. To that end, Metrex is actively partnering with Solvay, Covestro, and other component manufacturers to support their compatibility testing and advance policies and processes that will improve material compatibility. Metrex recognizes and applauds manufacturers' efforts to make material compatibility a central objective in designing medical equipment and devices. This includes developing formulas and materials with demonstrated resistance and durability even when exposed to disinfecting solutions and chemicals.

To read more about the importance of material compatibility and the risks of incompatibility, download "Evaluating the Material Compatibility of CaviWipes 2.0" here. For more information on the studies jointly conducted between Metrex, Solvay and Covestro, or if you have any specific material compatibility questions, visit www.metrex.com.

THE KEY TO SUCCESSFUL INFECTION PREVENTION

Metrex is continuing to provide healthcare facilities with advanced surface disinfectant products that are ideal for infection prevention. With efficacy claims against 42 pathogens, broad compatibility, 2-minute universal contact time and 1-step disinfectant cleaning, CaviWipes 2.0 can help healthcare facilities achieve better compliance, protection and patient outcomes.

CaviWipes[™] 2.0 Whitepaper

References

- * When the soil is not visible.
- ** Enveloped virus.
- *** Small, non-enveloped virus.
- 1. Haque, M. Health care-associated infections an overview. Infect Drug Resist. 2018; 11: 2321–2333, May 10, 2021, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6245375/
- 2. Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of Healthcare Quality Promotion (DHQP), May 10, 2021, www.cdc.gov/infectioncontrol/guidelines/disinfection/tables/table2.html
- 3. https://www.epa.gov/coronavirus/what-emerging-viral-pathogen-claim, May 10, 2021
- 4. List N: Disinfectants for Use Against SARS-CoV-2, May 10, 2021. https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2
- 5. RITTER HW. The germicidal effect of a quaternary ammonium compound (cetylpyridinium chloride) on Mycobacterium tuberculosis. Appl Microbiol. 1956 May;4(3):114-6.
- 6. https://infectioncontrol.tips/2018/07/19/balancing-disinfectant-efficacy-surface-compatibility/, May 10, 2021
- 7. Patient Room Turnover A Balance of Speed and Quality, May 10, 2021, https://www.eonsolutions.io/blog/patient-room-turnover-a-balance-of-speed-and-quality
- 8. Data on file