

ACECIDE-C

Efficacy against New and Emerging Pathogens

Tests for disinfection and sterilization of reusable medical devices are highly standardized to enable consistency from facility to facility. With the emergence of new pathogens, or new strains of pathogens, there is typically a lag between the discovery of the pathogen and the establishment of an effective and standardized disinfection test to kill it.

Like other High-Level Disinfectants/Liquid Chemical Sterilants (HLD/LCS), ACECIDE-C has been tested for efficacy against a wide variety of pathogens including two types of bacterial spores, mycobacterium, enveloped and non-enveloped viruses, and both gram positive and gram-negative bacterium. These tests encompass a wide variety of highly resistant organisms. In addition, testing protocols for HLD/LCS have many built-in safety factors. This ensures that the HLD/LCS process will remain effective despite possible variations in the resistance of microorganisms.

One new and emerging infectious microorganism is discussed below.

COVID-19 (coronavirus disease 2019)

Like all coronaviruses, *COVID-19* is an enveloped, positive-sense, single-stranded RNA virus. During disinfectant efficacy testing, safer "surrogate" or substitute organisms are used to replicate the resistance of dangerous pathogens. When testing the effectiveness of high level disinfectants/liquid chemical sterilants the surrogate organism used is HIV type 1 (HIV-1), which is also an enveloped, positive-sense, single-stranded RNA virus.

Testing of ACECIDE-C under worst-case conditions against HIV-1 showed total viral kill at 20°C and 5 minutes of contact time. When the endoscope is reprocessed within Olympus OER automated endoscope reprocessors with ACECIDE-C, the programmed 7-minute disinfectant contact time provides an additional 2-minute safety factor.

With the proven effectiveness of ACECIDE-C against HIV-1 under worst-case conditions, it is reasonable to conclude that *COVID-19* viral particles that may be present on an endoscope before high level disinfection would be destroyed when reprocessing is performed according to Olympus endoscope, Olympus OER, and ACECIDE-C instructions for use.

1. A.D

Cindi Linville Director of Quality Best Sanitizers, Inc February 25, 2020