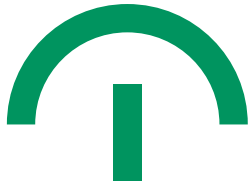




Let's work together
to create a better future

Solutions to guarantee safety in Veterinary Clinics

Rev. 3 | October 2021



Let's work together
to create a better future

What we do?

At Terragene® we offer simple and effective methods to accurately control cleaning and sterilization processes in veterinary clinics and labs. Available in a variety of formats, these high-performance control devices provides fast and consistent results so you can properly monitor all your infection and contamination control protocols.

terragene.com



Index

Washing, Disinfection & Hygiene

8

Cavitation performance test for Ultrasonic cleaners

CDWU

9

System for surface residual Protein detection

KPRO-2-E69

Sterilization Monitoring

Biological Indicators

13

Conventional self-contained Biological Indicators

BT10 | BT20 | BT30 | BT91

Chemical Indicators

15

Bowie-Dick Tests

Bowie-Dick Test Pack | Bowie-Dick Test Cards

16

Process Indicators

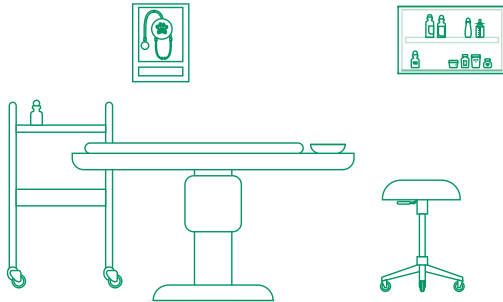
Type 1: Double adhesive labels & Tapes | Label Gun

17

Multivariable Indicators

Type 4: Single and double strips





Washing, Disinfection & Hygiene

It is vital to control the cleaning processes of instruments and devices since the result influences the success of the subsequent processes for sterilization. This control is crucial, particularly in automatic washing machines like washer-disinfectors and ultrasonic washing machines. The process parameters in the washing procedure may deviate from the acceptable limits. This can directly impact on the cleaning performance and affect negatively the final reprocessed materials. Moreover, the international Standards ISO 15883 (part 1 and 5), HTM-01 (part 01 and 05) and ANSI/AAMI (ST79:2017) require the monitoring of this process with a specific regime, through weekly or even daily check-ups.

Cavitation performance test for Ultrasonic cleaners

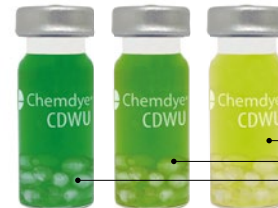
CDWU

Nowadays, ultrasonic washing machines are a fundamental tool for mechanical cleaning of veterinary instruments. The ultrasonic washing takes place through a process called cavitation, a microscopic phenomenon responsible for the removal of soil from the instruments.

Chemdye® CDWU indicators consists of a transparent vial, with a blue-colored reactive solution and glass beads immersed in it. The formulation of the solution contained in the vial allows the monitoring of cavitation capacity of the ultrasonic washer. When cavitation functions properly, vibration of the glass beads triggers a color change in the solution, from blue to yellow, through a range of green color intermediates. The CDWU indicators can be used for routine monitoring of ultrasonic washing machines with different ultrasonic washing configurations. It should be noticed that the CDWU indicators were developed to monitor the cavitation performance of the ultrasonic washing machine with an empty tank, that is, without any load.



UNPROCESSED

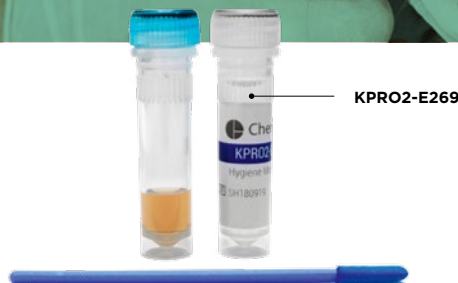


LOW CAVITATION CAPACITY



HIGH CAVITATION CAPACITY

System for surface residual Protein detection



Color change in response to different quantities of protein

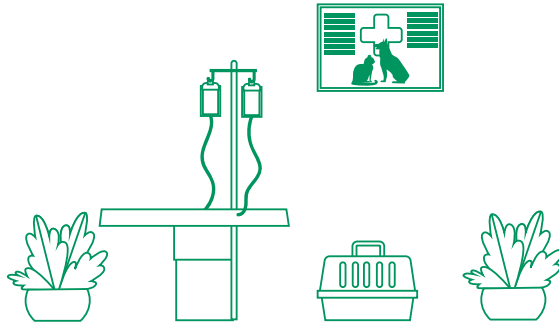


KPRO2-E69

The first step in properly cleaning surgical instruments is to rinse off all blood, bodily fluids and tissue immediately after use. If cleaning is not carried out adequately, it may render the disinfection stage ineffective, causing patients to be exposed to bodily fluids and tissue contaminants from prior patients, which can result in the transmission of pathogens and affect large numbers of animals.

Chemdye® KPRO2-E69 Hygiene System is designed to check cleanliness of surgical equipment by detecting protein residues left behind following improper cleaning. The system has a high absorption swab, allowing the collection of samples from different surfaces with the same efficacy.





Sterilization Monitoring

Sterilization procedures should be monitored using biological and chemical indicators. Biological indicators, or spore tests, are the most accepted means of monitoring sterilization because they assess the sterilization process directly by killing known highly resistant microorganisms. Chemical indicators do not guarantee sterilization; however, they help detect procedural errors (e.g., overloaded sterilizer, incorrect packaging) and equipment malfunctions. On the other hand, some chemical indicators should be used inside a package to verify that the sterilizing agent has penetrated it and reached the instruments inside.

Biological Indicators



Check out our Biological Indicators available here
terragine.com

Conventional self-contained Biological Indicators

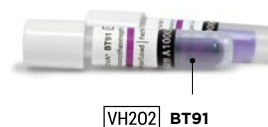


Biological Indicators (BIs) are the only devices internationally accepted as direct evidence of microbial lethality after a sterilization cycle. Terragene® offers its line of Conventional Self-Contained BIs to control the sterilization processes of veterinary materials and instruments. Its innovation technology allows results to be obtained within 24 hours (Vapor and VH2O2) or 48 hours (Ethylene Oxide and Dry Heat).

Bionova® Conventional SCBI

IC10/20

In order to incubate Conventional and Rapid Colorimetric Self-Contained BIs, Terragene® offers the Bionova® IC10/20 Dual Incubator, which provides optimal conditions for accurate readout of a wide range of biological indicators (both at 37 °C and 60 °C) due to its block heater.



Chemical Indicators



Check out our Chemical Indicators available here
terragine.com

Bowie-Dick Tests

Bowie-Dick Test Pack BD125X/1 | BD125X/2

Chemdye® Bowie-Dick Test Pack was developed to control air removal and steam penetration performance in vacuum-assisted steam sterilizers. They are single-use devices that consist of a lead free chemical indicator, BD Test Sheet, placed between porous sheets of paper, wrapped with crepe paper, with a Steam indicator label on the top of the package. Product BD125X/1 also has a Warning Sheet which contains a circular lead free chemical indicator, thus allowing an early detection of air removal failures before they appear on the central chemical indicator.



Bowie-Dick Test Cards BD8948X | BD8948X/1 | BD8948H

Chemdye® Bowie-Dick Test Card has been designed to monitor the effectiveness of air removal in vacuum-assisted steam sterilizers at 132 °C, 4 min and at 134 °C, 3.5 minutes. Chemdye® Bowie-Dick Test Card consists of a Type 2 metal free chemical indicator printed on one side of the card. Chemical indicator changes from purple to green when processed. Non-uniform color change indicates presence of an air pocket during the sterilization cycle thus indicating sterilizer malfunction.

BD8948H is a stainless steel re-usable Holder for keeping BD8948X and BD8948X/1 Test Cards in place for proper assessment of sterilization cycle.

Chemdye® BD125X/1 and BD8948X/1 are FDA Cleared.

Process Indicators



Double adhesive labels TYPE 1

Automatic record system labels have been designed to monitor Ethylene Oxide (CD13), Steam (CD23), Dry Heat (CD33) and Plasma or Vaporized Hydrogen Peroxide (CD43) sterilization processes. These self-adhesive labels are usually placed out of the plate, stuck to packages or pouches, allowing differentiation between processed and unprocessed items. Their double-adhesive technology allows easy label removal from the sterilization package for data documentation.

Label Gun

Chemdye® CG3 is a Three-line Automatic Labeler that allows a quick and easy labelling of sterilization packages through the use of special documentation labels, preventing the traceability errors of the packs.



Tapes TYPE 1

Cintape® Self-adhesive tapes have been designed to wrap and seal sterilization packages as well as to distinguish between items that have been exposed to the sterilization processes from those that have not. Terragene® has tapes for every sterilization process: Steam (CT22), Ethylene Oxide (CT10), Vaporized Hydrogen Peroxide (CT40) and Dry Heat (CT30).

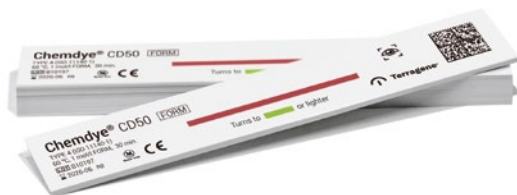
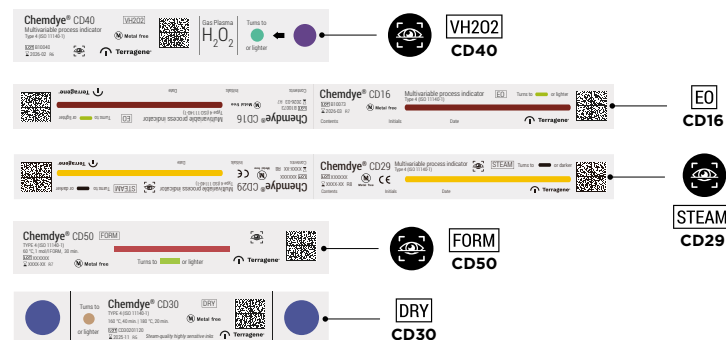
	UNEXPOSED	ACCEPTED EXPOSURE
EO CT10		
STEAM CT22		
VH ₂ O ₂ CT40		
DRY CT30		

Cintape® CT22 and CT40 are FDA Cleared.

Multivariable Indicators

Single and double strips TYPE 4

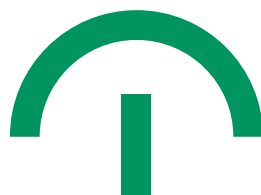
Chemdye® Type 4 internal control strips are multivariable indicators that rapidly shows if critical parameters of the sterilization process have been reached, ensuring appropriate penetration of the sterilizing agent inside the packages. These chemical indicators offers a distinct color change when exposed to the stated values (SVs) of the critical process variables.



Learn more and check the related products
terrargene.com

Chemdye® CD16, CD29 and CD40 are FDA Cleared.

Let's work together
to create a better future.



terragene.com