TECHNICAL INFORMATION
FOR
CLIDOX®-S

A CHLORINE DIOXIDE BASED STERILANT
FOR DECONTAMINATION IN AN ANIMAL CARE FACILITY

GENESTIL – 1 rue du mesnil – 60420 Royaucourt
Tel : 03 44 51 73 88 – Fax : 03 44 51 13 61
Email : info@genestil.com – site : www.genestil.com
**Sterilizing Level:** CLIDOX-S® diluted 1:3:1 kills bacteria including dried spores of *Clostridium sporogenes* ATCC 3584 and *Bacillus Subtilis* ATCC 19659 on environmental surfaces in 5 hours at 25°C.

**Disinfecting Level:** CLIDOX-S® diluted 1:18:1 kills vegetative bacteria including *Pseudomonas aeruginosa* ATCC 15442, *Staphylococcus aureus* ATCC 6538, and *Salmonella choleraesuis* ATCC 10708, pathogenic fungi(*Trichophyton mentagrophytes* ATCC 9533) and viruses*, and *Mycobacterium bovis* ATCC 35743 (tuberculosis bacteria) in 5 Minutes at 20°C when used on precleaned surfaces.

*This product completely inactivates Herpes Simplex Type 2 (G-strain), Polio Virus Type 1(Brunhilde-VR-ATCC-58), and Human Immunodeficiency Virus Type 1 (RF Strain) (HIV-1) (associated with AIDS) when diluted 1:18:1 at 3 minutes at 20°C on precleaned surfaces.

**DIRECTIONS FOR USE**

*IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING*

CLIDOX-S® solution can be used for the sterilization of hard, nonporous, inanimate, environmental surfaces such as stainless steel, plastics (such as: polycarbonate, polyvinyl chloride, polypropylene, and polystyrene), tile, and glass. For use in laboratory animal breeding and research animal quarters for controlling cross-contamination of microorganisms infectious to these animals and humans from treated surfaces.

Clean articles thoroughly prior to treatment and immersion in CLIDOX-S® at a 1:3:1 dilution for 5 hours at 25°C. Lumen of any hollow instrument must be flushed and filled. Aseptically transfer the treated articles to a sterile enclosed container for air drying. Judgment of the user according to individual techniques may require rinsing with sterile water as an alternative to air drying.

CLIDOX-S® solution can be used at the 1:18:1 dilution for 5 minutes at 20°C for the disinfection of hard, nonporous, inanimate, environmental surfaces such as stainless steel, plastics (such as: polycarbonate, polyvinyl chloride, polypropylene, and polystyrene), tile, and glass. Instruments can also be decontaminated with this product prior to sterilization. For use in laboratory animal breeding and research animal quarters for controlling cross-contamination of microorganisms infectious to these animals and humans from treated surfaces. Also for use in laboratories, dental and medical offices, hospitals, and other health care facilities.

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to preclean or decontaminate critical or semi-critical medical devices prior to sterilization.

Kills HIV-1 (AIDS virus) on precleaned environmental surfaces/objects previously soiled with blood/body fluids in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood/body fluids, and in which the surfaces/objects likely to be soiled with blood/body fluids can be associated with the potential for the transmission of Human Immunodeficiency Virus Type 1 (HIV-1) (associated with AIDS).
SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1 (AIDS VIRUS) OF SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS:

**Personal Protection:** Disposable latex or vinyl gloves, gowns, face masks, or eye coverings as appropriate must be worn during all cleaning of blood/body fluids and during decontamination procedures.

**Cleaning Procedures:** Blood/body fluids must be thoroughly cleaned from surfaces/objects before application of this product.

**Contact Time:** HIV-1 (AIDS virus) is inactivated after a contact time of 2 minutes at 23°C (room temperature). Although efficacy at a 2-minute contact time has been shown to be adequate against HIV-1 (AIDS virus), this time is not sufficient for the non-HIV organisms listed on the label. Therefore, a 5-minute contact time must be used for disinfection against all listed, non-HIV organisms.

**Disposal of Infectious Material:** Blood/body fluids should be autoclaved and disposed of according to federal, state, and local regulations for infectious waste disposal.

**APPLICATION:**
Soaking is the best method of application; however, the solution may be applied by any convenient means (i.e., mop, cloth, sponge, spray, or fogged). Surface must remain wet for a minimum of five minutes.

**FOGGING DIRECTIONS:**
Use CLIDOX-S® at the 1:5:1 dilution for use in fogging/wet misting operations to sanitize surfaces as an adjunct to acceptable manual cleaning and disinfecting of room surfaces. Area must be precleaned with all gross soils removed prior to application. Pay close attention to safety issues and wear all appropriate personal protection equipment (gloves, face shield/eye goggles, lab coat, respirator suitable for acid mist, and booties). Please read Material Safety Data Sheets before using. Remove all animals and plants from area to be fogged. Remove or cover any equipment, light fixtures, or vents that should not be exposed to the CLIDOX-S®. Keep all people out of area while area is being treated. A turntable with an automatic timer provides the most uniform coverage. Follow specific directions from the fogger’s manufacturer. Make sure enough chemical is placed in the reservoir to complete the job. Remember when determining the size of the room, multiply length x height x width. Place fogger in a central unobstructed location. Fog until the entire area is moist using an automatic fogger. Follow specific directions from the fogger's manufacturer. Rinse fogger with water following use. Wipe down treated surface with fresh, DI or RO water to remove any residue within an 8-hour period following application to reduce the possibility of corrosion.

**DECONTAMINATION OF INSTRUMENTS:** Dismantle equipment, if possible, and rinse free of heavy soil and gross debris. Moderate amounts of organic soil will not lower the efficiency of CLIDOX-S®. Soaking is the best method of application; however, the solution may be applied by any convenient means (i.e., cloth, sponge, or spray). Allow surfaces to remain thoroughly wet with solution for five minutes. Rinse with fresh, DI or RO water within 8-hours of application to reduce the possibility of corrosion.
CHEMICAL NEUTRALIZATION:
To dispose of large quantities of CLIDOX®-S solution, the CLIDOX®-S mixed solution should be de-activated prior to neutralization. CLIDOX DE-ACTIVATOR will de-activate the solution when used at 2oz per gallon of mixed CLIDOX®-S solution. Then pH Control can then be added to raise the pH of the solution prior to discharge. 1/8 to 1/4 ounce per gallon is a recommended starting point when determining required amount of pH Control. Good ventilation is mandatory. Always wear personal protective equipment when dealing with chemicals.

BASIC SOP GUIDELINE
This is only a basic guideline to help the customer set up their own SOP (Standard Operating Procedures). No two facilities are exactly the same, therefore, it is important that the customer design a procedure that will work for them. Please contact your PRL Representative if you have any questions. Refer to the master label for complete instructions.

1. **Remove all animals** and plant life from the areas to be decontaminated.
2. Obtain and wear all personal protective equipment necessary for procedure. Wear personal protective equipment including but not limited to a protective mask suitable for acid mist and chlorine if there is a possibility of exposure to mist.
3. Mix CLIDOX®-S (EPA REG # 8714-8) solution as directed. It is imperative that the mixing directions are followed accurately. Wait **fifteen** minutes before using.
4. If entire room is being disinfected, shut down HVAC system to the area(s) being treated. If total shut down is not possible, cover all in-going and out-going air ducts with plastic. Wipe down vent(s) with CLIDOX®-S solution before covering. Good ventilation is required for all other applications or procedures.
5. Cover any equipment or electrical outlets that should **not** be exposed to the CLIDOX®-S spray. Carefully wipe these surfaces with CLIDOX®-S solution before sealing.
6. Make sure **ALL surfaces are wet and remain wet for a minimum of five minutes**.
7. **IF ENTIRE ROOM WAS TREATED, THE ROOM SHOULD BE TOTALLY VENTILATED BEFORE RENTRY!!!!** If ventilation system was shut down during the procedure, it may be possible to reenter the room in 2 to 4 hours. If the ventilation system was not shut down during the procedure, reentry depends on the amount of air changes per hour that your ventilation system is designed for.
8. Remove plastic coverings. Pharmacal suggests that surfaces are wiped down with DI or RO water to remove any residue within an 8-hour period following application to reduce the possibility of corrosion. Isopropyl alcohol may be used to remove the salt residue in critical care areas and hoods.
MIXING DIRECTIONS
FOR CLIDOX®-S SOLUTIONS EPA # 8714-8

COVERAGE:
One gallon of mixed solution will cover approximately 100 square feet.

APPLICATION METHODS:
Mop, cloth, sponge, spray.

1 Gallon = 128 ounces  29.57 Milliliters = 1 ounce

1 : 3 : 1 Dilution
1 part CLIDOX®-S BASE + 3 parts water + 1 part CLIDOX®-S ACTIVATOR = 5 parts
128 ounces divided by the five parts = 25.6

To mix 1 gallon:

CLIDOX®-S BASE:                1 part  x 25.6 ounces =      25.6 ounces
Tap Water:                               3 parts x 25.6 ounces =      76.8 ounces
CLIDOX®-S ACTIVATOR:   1 part  x 25.6 ounces =       25.6 ounces
                        128.0 ounces

OR

25.6 ounces x 29.57 mls/ounce. = 757 mls.

CLIDOX®-S BASE :                1 part  x 757 mls =       757 mls.
Tap Water:                             3 parts x 757 mls =     2271 mls.
CLIDOX®-S ACTIVATOR:    1 part  x 757 mls =       757 mls.
                   3,785 mls.

After mixing, let sit for 15 minutes before using.
Use solution within 24 hours of mixing.

1 : 18 : 1 Dilution

To mix 1 gallon:

CLIDOX®-S BASE :                1 part  x 6.4 ounces =     6.4 ounces
Tap Water:                             18 parts x 6.4 ounces =  115.2 ounces
CLIDOX®-S ACTIVATOR:    1 part  x 6.4 ounces =     6.4 ounces
                   128 ounces

OR

6.4 ounces x 29.57 mls. = 189.25 mls.

CLIDOX®-S BASE :                1 part  x 189.25 mls. =   189.25 mls.
Tap Water:                             18 parts x 189.25 ml.s =  3,406.50 mls.
CLIDOX®-S ACTIVATOR:    1 part  x 189.25 mls. =   189.25 mls.
                   3,785.00 mls.

After mixing, let sit for 15 minutes before using.
Use solution within 14 days of mixing.