

CURIS[®] Trinity biodecontamination of a Baker SterilGARD[®] Guide

BAKER

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Two methods of enclosing the biosafety cabinet (BSC) may be employed: tenting (wrapping the BSC in plastic sheeting) or taping (taping around the viewscreen with the aid of a fabricated front panel and using a specially designed exhaust cap). Both methods have been proven to be effective. Some facilities will prefer one method of enclosure over the other. Please consult your local biosafety officer for help.



Taping

Recommended Protocol:

1. Remove any equipment not intended to be decontaminated from the biosafety cabinet. Close internal electrical covers, if present.
2. Place any Biological Indicators (BIs) or Chemical Indicators (CIs) desired throughout the work area, with a focus under and above the HEPA filters.
3. Turn the BSC blower OFF.
4. Place the front decon panel on the arm rest and lower the viewscreen to hold it in place. This should bring the opening to normal opening height for operation (normally 8”).
5. Tape around the front decon panel to seal, covering all openings and corners.
6. Tape around the front view screen sides and top. You will have to lift the front fascia panel to do so, paying particular attention to the corners and under the electrical panel.
7. Place the exhaust cap over the exhaust HEPA filter on the top of the unit. Secure with the screws provided to ensure a complete seal on all sides.
8. If the BSC has a cable port, this will need to be sealed fully with tape. To do so, remove the outer right panel of the BSC side wall and seal the outside of the cable port (see image below).
9. Place the CURIS[®] fogger on the Trinity cart. Follow the on-screen instructions to connect the fogger to the Trinity cart. The program to select is:
 - Click “Class II BSC”
 - Click “A1/A2/B1”
 - Select your cabinet width
 - Click “Full” extraction
10. Following the on-screen instructions, attach the hoses. Trinity OUT will attach to the front panel, and Trinity IN will attach to the exhaust cap.
11. Continue to follow the on-screen instructions to conduct the decontamination cycle. The blower will be “bumped” or turned on for 3-minute pulses spaced 30 minutes apart, as instructed by the software. The full cycle will take 4-5 hours.
12. Once the cycle completes, remove the hoses and follow the Trinity on screen instructions to reset the sensors.
13. Remove the tape from around the viewscreen, and remove the front decon panel.
14. Remove and process any BIs and CIs placed inside the BSC.
15. The BSC is ready to resume use!



Tenting

Recommended Protocol:

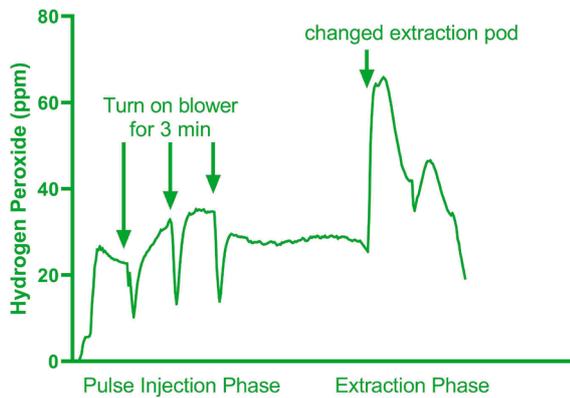
1. Remove any equipment not intended to be decontaminated from the biosafety cabinet. Close electrical covers.
2. Place any Biological Indicators (BIs) or Chemical Indicators (CIs) desired throughout the work area, with a focus under and above the HEPA filters.
3. Lower the viewscreen to bring the opening to normal opening height for operation (normally 8”).
4. Turn the BSC blower ON.
5. “Tent” the BSC by sealing it completely with plastic sheeting. This will ensure proper circulation of the hydrogen peroxide throughout the HEPA filters. Be sure to seal around the right-side panel, as this is not a sealed panel. Place 4 objects (tape rolls, test tube racks, etc., see picture below) on the four corners of the front fascia panel underneath the plastic to allow the tenting an air gap down the front of the BSC. This provides a greater air movement during the decontamination cycle.
6. Place the CURIS® fogger on the Trinity cart. Follow the on-screen instructions to connect the fogger to the Trinity cart. The program to select is:
 - Click “Class II BSC”
 - Click “A1/A2/B1”
 - Select your cabinet width
 - Click “Full” extraction
7. Following the on-screen instructions, attach the hoses to the Trinity cart, and then place in through the front access opening by cutting small slits in the plastic. Place these slits as far away from one another as possible. Seal the cam lock of the hose to the plastic with plenty of tape.
8. Continue to follow the on-screen instructions to conduct the decontamination cycle with the BSC blower constantly ON. Do not turn it off during the decontamination cycle.
9. Once the cycle completes, remove the hoses and follow the Trinity on-screen instructions to reset the sensors.
10. Remove the plastic from the BSC.
11. Remove and process any BIs and CIs placed inside the BSC.
12. The BSC is ready to resume use!



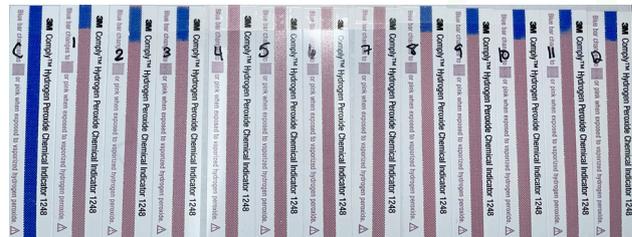
Observations and Notes:

- Recommended locations for BIs and CIs to test for sufficient hydrogen peroxide decontamination would be throughout the work area, under the work surface, downstream of the supply and exhaust HEPA filters. When placing BIs and CIs on HEPA filters, keep at least 3 inches of distance from the edge of the filter. All BIs and CIs should be negative for growth/positive for color change to be considered a successful biodecontamination.

- If desired, a VHP sensor can be placed through the cable port to show internal ppm concentration (tape around the cable to prevent leakage). Average effective concentration was 10-30 ppm.
- If there is significant moisture, the extraction pod may need to be changed during the extraction phase. Please monitor this cycle closely.



Internal concentration of hydrogen peroxide (ppm) was monitored with a sensor throughout the protocol.



Chemical indicators placed throughout the BSC (#1-12) and the negative control (C). Blue means no exposure, while pink indicates exposure to hydrogen peroxide.



Biological indicator results once incubated in color change media. The C is the negative control, and #1-12 are different locations throughout the BSC. A turbid yellow indicates growth of bacteria, and no kill, while clear purple indicates no bacterial growth and full kill with hydrogen peroxide.

