Phileas[®] Genius[®] biodecontamination of a SCI-tive Guide

Kara Held Ph.D. (Baker Science Director) Jennifer Pachas (Baker Laboratory Technician)



BAKER

RUSKINN

Recommended Parameters:

- 1. Set SCI-tive RH to 30%.
- 2. Align worksurface to be centered and flush to back wall with a small gap on both left and right sides.
- 3. SCI-tive should not be in Atmospheric control. Keep it on the Main screen.
- 4. Place any Biological Indicators (BIs) or Chemical Indicators (CIs) desired throughout the work area.
- 5. The procedure should be started in the morning and run overnight. It takes ~14 hours for the VHP to break down to safe levels (below 1ppm).
- Set a Zone for 1.15m³ (for one SCI-tive work area, excluding the interlock), 3 min, 20mL/min, 5 cycles.
- 7. Water in the reservoir can be present or removed.
- 8. Allow for a MINIMUM of 2 hours after VHP dispersal for a soaking period before removing BIs and CIs.





www.bakerco.com/grow

Observations and Notes:

- Recommended locations for CIs and BIs to test for sufficient VHP decontamination would be all 8 corners, the center of the ceiling and center of the work tray, and the reservoir. All BIs and CIs should be negative for growth/positive for CI color to be considered a successful decon. Shifting the work surface tray can lead to negative results on an entire side panel of the SCI-tive.
- If the water is removed, the reservoir will be decontaminated.
- If desired, a VHP probe can be placed through the cable port to show internal ppm concentration (plug was cutand sealed around the cable to prevent leakage) to show internal ppm concentration. Average effective concentration is 150-200ppm. If the ppm reaches above 300ppm, the RH sensor can die.

- Remove Detox sachets before beginning decon procedure. This will hinder the effectiveness of the decon. We do not recommend having them present in the SCI-tive during decon.
- The blue arm port covers must be in place. The sleeves or gloves when attached do not decontaminated properly.
- The interlock must be closed during decon.
- The Hypoxic cycle increases the VHP concentration for unknown reasons.
 Do not do this in an attempt to "flush" the workstation.
- After monitoring for many hours after a decon, we did not see a resurgence of VHP; it does not off-gas later on. Once the VHP is down to 0ppm, it is safe for users and cell culture to resume.



www.bakerco.com/grow