



Distributed by:



PH: +1 (760) 621-7692

[sales@phoenix-scientific.com](mailto:sales@phoenix-scientific.com)

[mycofogbio.com](http://mycofogbio.com)

**MycoFog™ Phoenix Scientific**

**Efficacy validation of 7.8 BIO MycoFog system with 7.8% hydrogen peroxide using biological indicators.**

**MycoFog procedure** please refer to MycoFog manual. For a more detailed BI procedure, please refer to BI instructions

**Incubators are** 150-165 L in volume  
Baker-Ruskinn InvivO<sub>2</sub> 400 Workstation is 213L

**Biological indicators (BIs)** are spores at least 10<sup>6</sup> spores of *Geobacillus stearothermophilus* in a culture tube. The spores are inoculated onto a stainless steel disc and placed into the culture with an ampule of growth medium with growth indicator dye as illustrated in Figure 2. BIs are placed in the incubator chamber as exemplified in Figure 1 and noted (with results in) Table 1. At the end of the treatment cycle, the BIs are incubated at 57°C for 24 hrs (Terragene) or 7 days (Mesa Labs) and noted for color change (purple to yellow indicates spore growth, not effectively killed). No changes indicates at least a log 6 reduction in spores. Spore level of BIs range from 1.6 x 10<sup>6</sup> to 2.4 x 10<sup>6</sup>, D-values range from 1.1 min @ 2mg/L to 2.4 min @ 2 mg/L

Table 1

Performed by	Date	Incubator Type	URF	URR	LRF	LRR	ULF	ULR	LLF	LLR	C	Control
Partner	Aug 2023	Thermo Forma	N			N					N	Y
7.8 BIO	Sept 2023	VWR/Sheldon		N					N		N	Y
Partner	Sept 2023	PCHBI	N			N					N	Y
7.8 BIO	Oct 2023	VWR/Sheldon		N			N				N	Y
7.8 BIO	Dec 2023	VWR/Sheldon			N			N			N	Y
Partner	Dec 2023	Thermo Heracell		N		N					N	Y
Partner	Jan 2023	Baker-Ruskinn			N			N			N	Y
7.8 BIO	Feb 2023	VWR/Sheldon	N							N	N	Y

Table 1 Key: URF= Upper Right Front, URR=Upper Right Rear, LRF=Lower Right Front, LRR=Lower Right Rear, ULF=Upper Left Front, ULR=Upper Left Rear, LLR=Lower Left Rear, LLR=Lower Left Right, C=Center, Control is and untreated BI (on the lab bench), N=Location tested, no growth, Y=Location tested, growth, BLANK=Location not tested

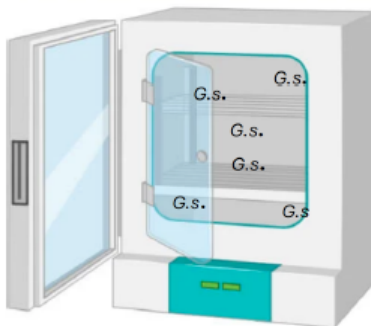


Figure 1  
Cartoon representation of possible location of biological indicators in biodecontamination testing.

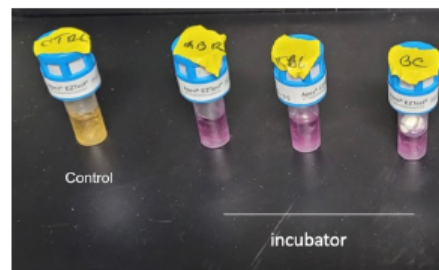
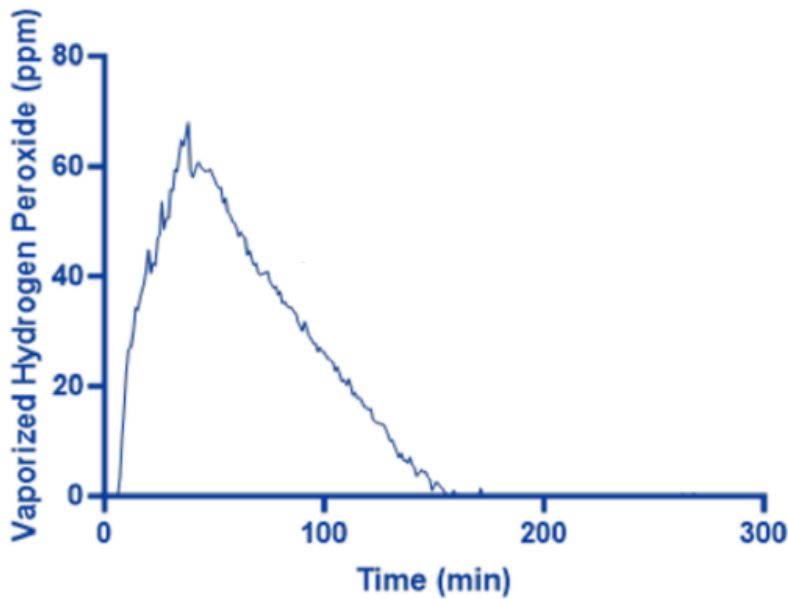


Figure 2

## Safety Validation of 7.8 BIO MycoFog system using an H<sub>2</sub>O<sub>2</sub> gas measuring system.

**MycoFog procedure** please refer to MycoFog manual. H<sub>2</sub>O<sub>2</sub> was measured using the Vaisala Inc. HPP272 probe in a Baker ReCO<sub>2</sub>ver™ incubator.

### MycoFog 180 min cycle

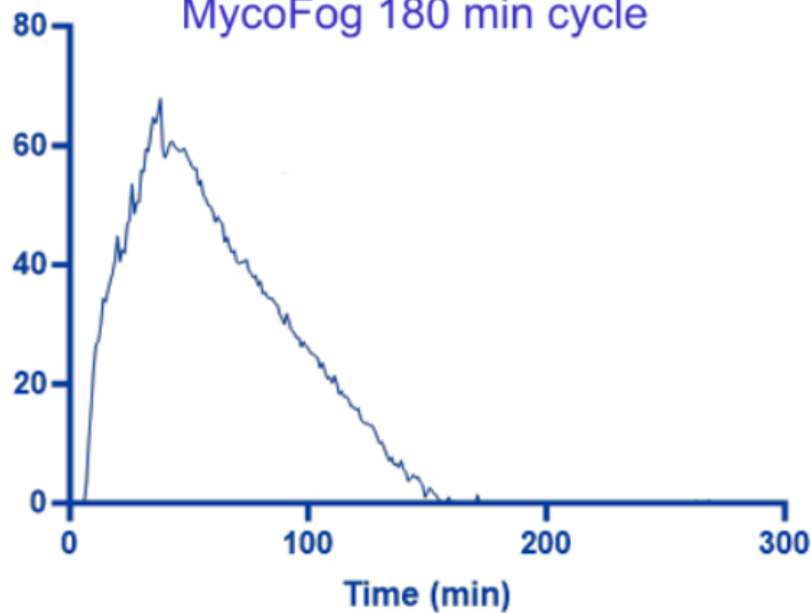


#### Results:

In each case, the level of H<sub>2</sub>O<sub>2</sub> was at the OSHA limit by the end of the run time.

Run 1

### MycoFog 180 min cycle



Run 2



**MycoFog™**

Distributed by:



**Phoenix Scientific**

**PH: +1 (760) 621-7692**

[sales@phoenix-scientific.com](mailto:sales@phoenix-scientific.com)

[mycofogbio.com](http://mycofogbio.com)