



ClorDiSys

"The Chlorine Dioxide People"

Application Note #51

The ClorDiSys Minidox-M Chlorine Dioxide Gas Generator for use in decontaminating Biological Safety Cabinets

Chlorine Dioxide Gas is approved by NSF International for decontaminating Biological Safety Cabinets (BSCs). It joins formaldehyde as the only approved method for decontaminating BSCs. Chlorine Dioxide gas decontamination of a BSC can be performed in 90 minutes from start to finish, compared to the minimum 6 hour gas exposure that is recommended when using formaldehyde (National Sanitation Foundation, 2007b). Chlorine dioxide gas also does not leave residues like formaldehyde does. As such, chlorine dioxide gas is quickly becoming the preferred method for the decontamination of biological safety cabinets.

The Minidox-M is a chlorine dioxide gas generating system capable of connecting to, and decontaminating chambers from 1-40,000 ft³, including BSCs. Part of the validation studies for decontaminating BSCs with chlorine dioxide gas were performed using a Minidox-M. The Minidox-M was used because of its tight-process control and its ability to offer a highly repeatable process due to its integrated concentration monitor.

To decontaminate BSCs, the Minidox-M would connect up to a BSC through a universal interface plate, capable of fitting any make and model BSC. Chlorine dioxide gas can either be exhausted through the HVAC system, or through a carbon scrubber which would break down the gas. All necessary equipment is available through Clordisys.



Highlights of the Decon System Include:

- **Able to quickly connect up to BSCs**
- **Tight control during the entire cycle, maintaining humidity and concentration levels throughout the cycle**
- **Fast aeration**
- **No residuals to clean up**
- **Entire decontamination including aeration in approximately 90 minutes**
- **Able to penetrate HEPA filters with ease**
- **Printed run record that contains: date, cycle time, relative humidity, temperature, pressure, and chlorine dioxide gas concentration**
- **Chlorine dioxide gas is non-carcinogenic, non-flammable**

Note: The Minidox-L or Cloridox-GMP CD generators can also interface with and decontaminate biological safety cabinets.

 **ClorDiSys**

50 Tannery Rd; Suite 1, Branchburg, NJ 08876 Tel:(908) 236-4100 Fax:(908) 236-2222

www.clordisys.com

89-033 Rev 11/2018