

## Sentinel XT Clear PAPR

Protecting employees in biopharmaceutical facilities while conducting cleaning and disinfection activities



## **APPLICATION**

Biopharmaceutical companies preparing parenteral solutions, conducting sterile compounding, or filling syringes in a clean room environment often need to provide worker respiratory protection while cleaning their sterile suites with Spor-Klenz® or similar products.

## ILC Dover's Sentinel XT Clear has been specifically designed to support this application

- Clear hoods provide panoramic view which reduces the potential for injuries
- Ergonomic back harness ideal for mopping ceilings, walls, and floors
- Doubled bagged, gamma irradiated hood and breathing tube combination packs support suite operations
- Extensive filter performance data against mixtures containing peracetic acid, acetic acid, and hydrogen peroxide helps your team develop accurate change out schedules
- Trade-in programs help eliminate up front switching costs and provide you with new equipment

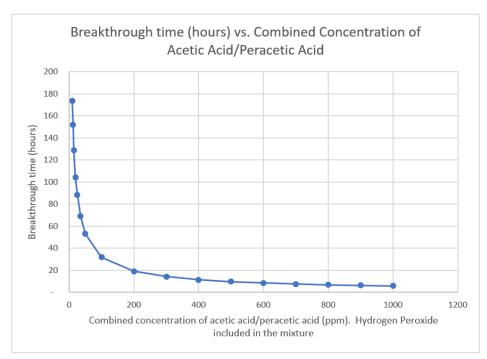
## **SUPPLEMENTAL TESTING - SPORICIDAL DISINFECTANTS**

Cartridges were tested against a mixture of 210 ppm acetic acid, 130 ppm hydrogen peroxide and 80 ppm peracetic acid at a flow rate of 57 lpm and 50% relative humidity. Service life was at least 19 hours with acetic acid breaking through first. Because the respirator uses 3 cartridges, this flow rate is appropriate for a loose fitting PAPR hood in which the minimum flow rate is 170 lpm.

Chemical	Acetic Acid (ppm)	Peracetic Acid (ppm)	Hydrogen Peroxide (ppm)	Flow Rate (lpm)	RH (%)	Break Concentration (ppm)	Time (min)
Peracetic Acid Mixture	210	80	130	57	50	5	1149
						5	1207
						5	1154

Additional testing against sporicidal disinfectants (e.g. SporKlenz®) was performed over a range of acetic acid/peracetic acid concentrations shown in green below. Breakthrough times in hours/8hr shifts of continuous use are provided.

Combined Concentration (ppm)*		Hours	8hr Shifts
	7	226	28.2
	10	174	21.7
	12	152	19.0
	15	129	16.1
	20	104	13.0
	25	88	11.1
	35	69	8.6
	50	53	6.6
	100	32	4.0
	200	19	2.4
	300	14	1.8
	400	11	1.4
	500	10	1.2
	600	9	1.1
	700	8	1.0
	800	7	0.9
	900	6	0.8
	1000	6	0.7



Notes: \*Combined concentration of acetic acid/peracetic acid. 6:1 ratio by volume. Acetic acid always breaks through first.

AJE report actual test concentrations - 6/23/2023, 8/29/2023





S-3603 Gamma Irradiated Hood & Breathing Tube





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