

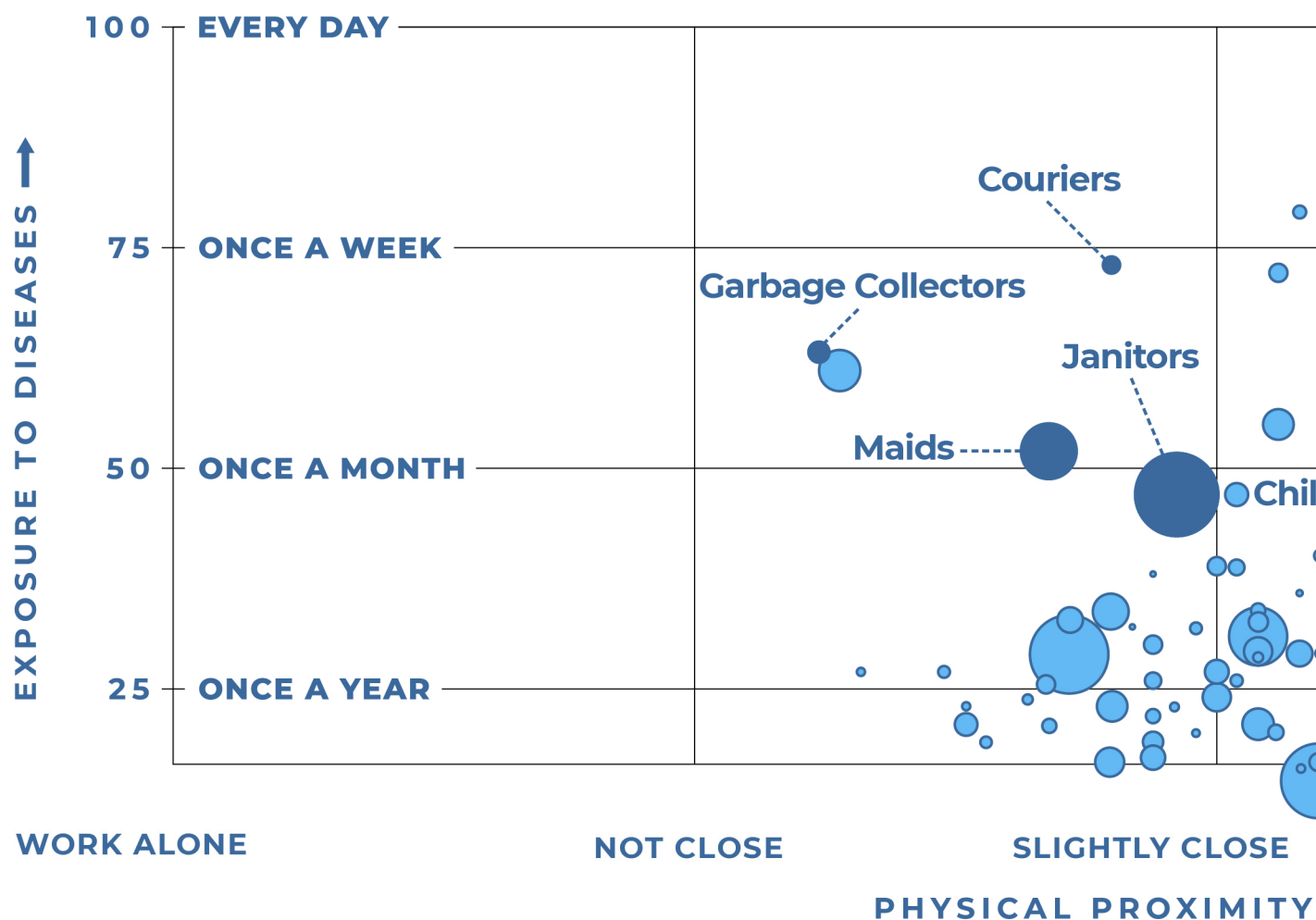


EnviroKlenz®

Advanced Air Purification for
Pathogens, Chemicals and Odors

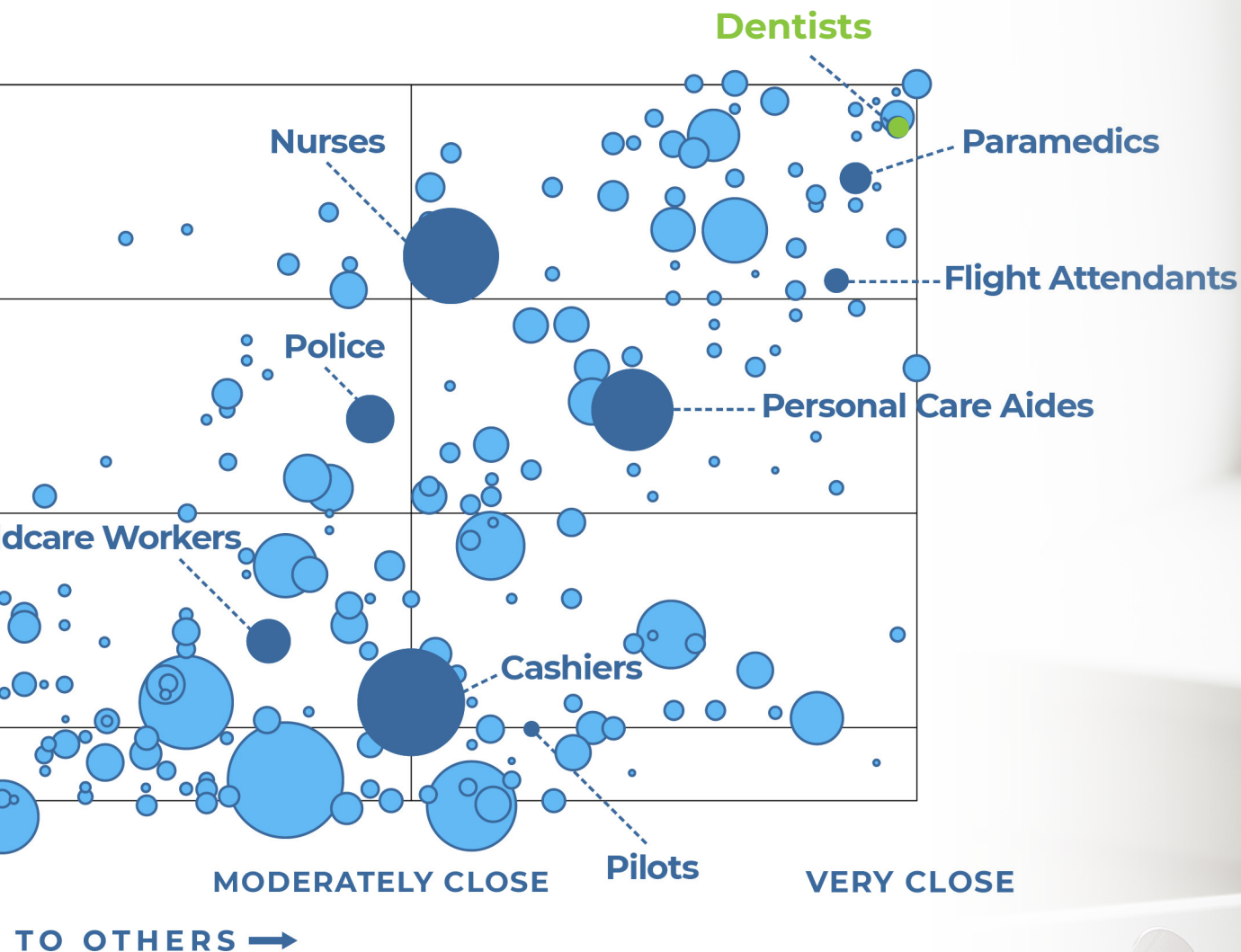


Risk of Exposure by Occupation in the United States

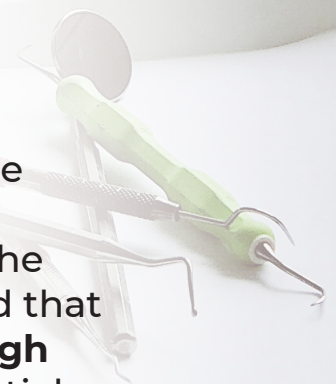


- The X-Axis Depicts the Frequency that each Profession is Exposed to disease and infections
- As the Coronavirus Continues to Spread, essential workers with the closest proximity to others have the greatest risk of exposure
- The Bubbles depicted on the chart illustrate the occupation and the larger the bubble the greater the population in that workforce
- The Y-Axis represents the average proximity to others during a workday
- Health Care Works are at the greatest risk to diseases and infection daily and have the highest proximity to one another and patients

States

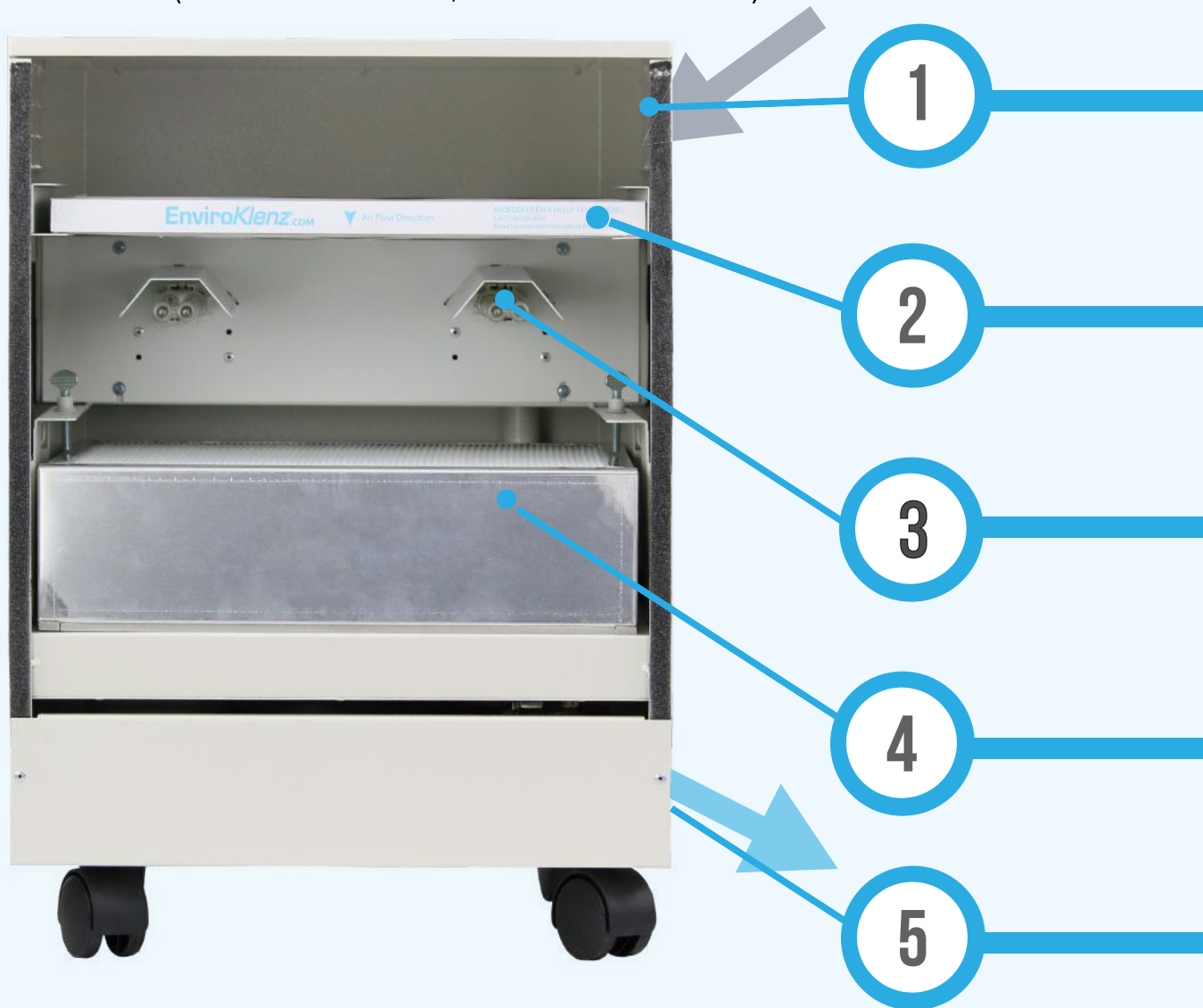


The widespread transmission of COVID-19 has become a risk not only for the everyday American, but also to those health care providers who are having extreme levels of contact with patients during this pandemic outbreak. The American Association of Endodontists (AAE) have stated that **dental professionals, in particular, are experiencing high risks for nosocomial infection** and even have the potential to become carriers of this disease. Dental professionals increased exposure risks to this highly infectious respiratory disease stems from this healthcare workers close contact and proximity to a patient's oropharyngeal region – which can include aerosol generation of saliva within the air space of this dental setting.



EnviroKlenz Mobile Air System with UVC | 3 Sta

The EnviroKlenz® Mobile Air System with UV Light combines Advanced EnviroKlenz technology for toxic and noxious chemical and odor removal with HEPA filtration and ultraviolet germicidal radiation (UVC) to remove airborne particulates and allergens, and inhibit growth of captured microorganisms (such as bacteria, mold and viruses).



Technical Specifications:

CFM: 85, 150, 200, 250

Power: 115 volts

Decibel: 55, 56, 59, 62

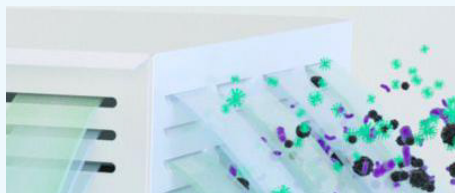
Weight: 38lbs

Dimensions: 22" x 15.5" x 15"

Room Size: Treats Up to 1000 Square Feet

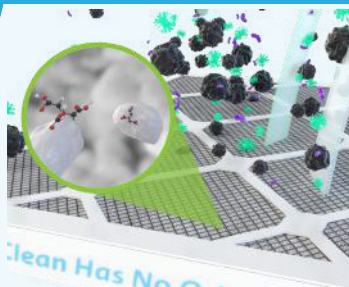
Age Filtration

Air Intake



- Air is pulled into the EnviroKlenz System through vents on three sides of the System.
- 250 CFM

EnviroKlenz Air Cartridge



- Earth Mineral Technology
- No by products or harmful agents
- EnviroKlenz Air Cartridge is effective against toxic or noxious odors and chemicals through our proprietary "Adsorptive Neutralization" process.
- The EnviroKlenz Air Cartridge is designed to last 4-6 months, ensuring that the unit operates at peak odor removal efficiency at all times.

UVC Bulbs



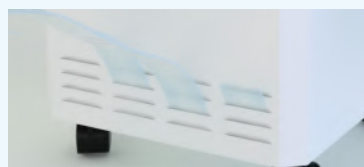
- 254nm wavelength
- UVC lamps are located before (and radiating on) the collection side of the HEPA filter. Unlike systems that depend on killing/inactivating the organisms as they pass through the UVC light in a very short period of time, the UVC light is continuously shining on the collected organisms with a very high efficiency of kill.

HEPA Filter



- Capture Particulates as small as 0.3 microns at a 99.99% rate
- The HEPA filter captures harmful dust, particulate, allergens, pet dander, microorganisms, and more.
- Because there is no bypass around the HEPA filter, every unit performs at HEPA efficiency.

Air Out-take



- Clean air flows through vents on the front of the system

[Learn More](#)

EnviroKlenz Air Cartridge for VOCs & Odor Neutralization

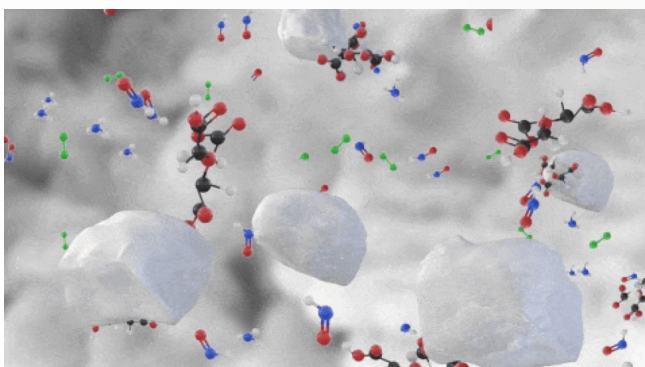
Specs: 14" x 14" x 1"

Coupled with our medical-grade HEPA filter, the EnviroKlenz Air Cartridge makes an unstoppable system in cleaning your indoor air by removing harmful VOC's and indoor toxins

The Cartridge utilizes the EnviroKlenz patented earth mineral technology which works through a process of destructive adsorption of the chemical odors and VOCs. As the polluted air comes into contact with the EnviroKlenz earth minerals it adsorbs, neutralizes, and breaks down the chemistry of the chemical compound while actively capturing dust, dander, and allergen particles.

How EnviroKlenz Works

As the chemical pollutants come into contact with the EnviroKlenz® earth mineral, the earth minerals adsorb, neutralize, and break down the chemistry of the chemical compound(s).



EnviroK

EnviroKlenz HEPA Filter

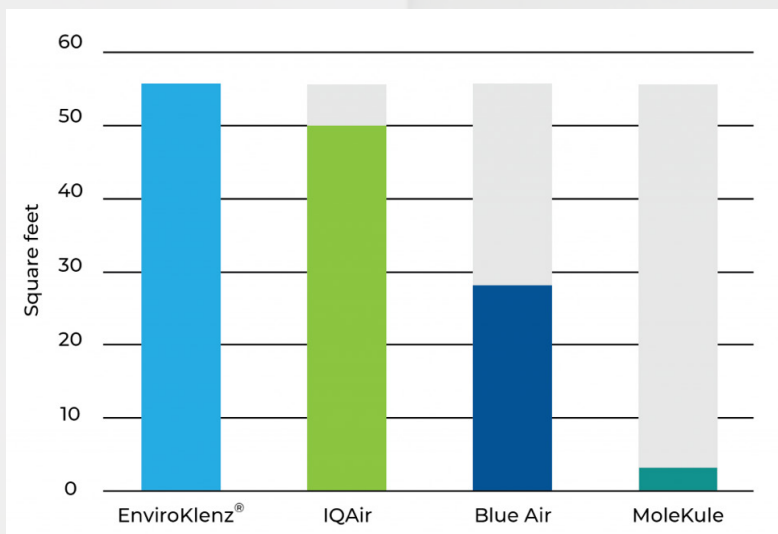
Specs: 14" x 14" x 4"

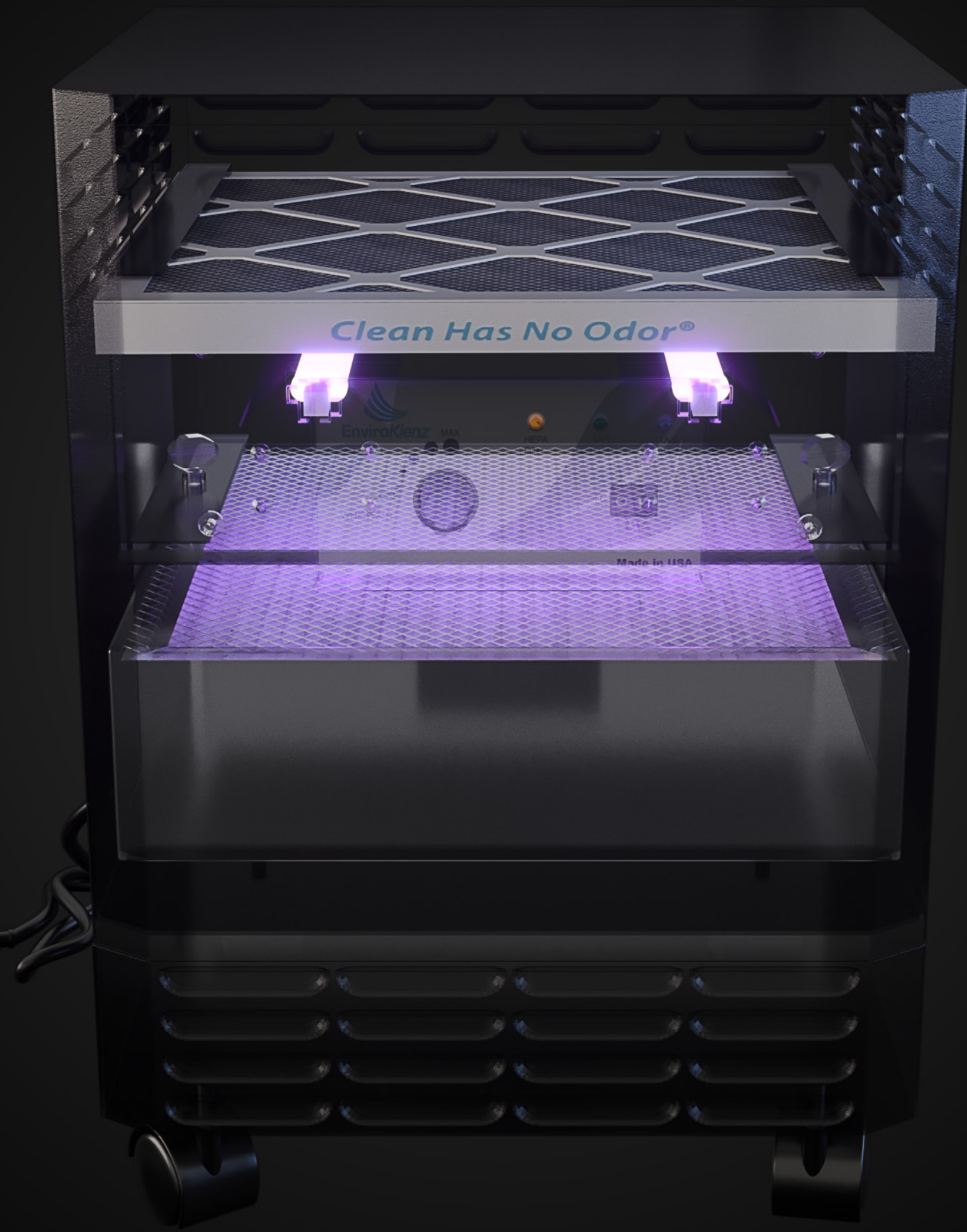
The EnviroKlenz HEPA filters trap air contaminants in a complex web of fibers. Depending on the size of the particle, this can happen in four different ways: Inertial Impaction, Diffusion, Interception, or Sieving

Larger contaminants are trapped via inertial impaction and sieving. The particles either collide with the fibers and become trapped or are trapped while attempting to travel through the fibers. Medium sized particles, as they move through the filter, are grabbed by the fibers via interception. Smaller particles are dissipated as they travel through the filter and eventually collide with a fiber and are trapped.

Particulate Matter Filter Media

The EnviroKlenz Air System has the highest amount of particulate matter filter media with over 56 square feet. The more square feet of particulate matter media results in a filter that can capture more particulate matter before needing to be changed.





Ultraviolet Germicidal Irradiation

The EnviroKlenz® Mobile Air System with UV Light combines Advanced EnviroKlenz technology for toxic and noxious chemical and odor removal with HEPA filtration and ultraviolet germicidal radiation (UVC) to remove airborne particulates and allergens and inhibit the growth of captured microorganisms (such as bacteria, mold, and viruses)

UVC lamps are located before (and radiating on) the collection side of the HEPA filter. Unlike systems that depend on killing/inactivating the organisms as they pass through the UVC light in a very short period of time, the UVC light is continuously shining on the collected organisms with high efficiency of kill

Indicator lights inform you when individual UVC lamps need to be replaced or when the HEPA filter is clogged with particulate buildup

EnviroKlenz Technology Against Pathogen and

Plaque forming units after exposure of MS2 to metal oxide formulations (standardized data)

BASE FORMULATION	POWDER CONCENTRATION	CONTACT TIME	
		5 MIN	90 MIN
HIGH SURFACE AREA MGO	10 MG/ML	0	0
HIGH SURFACE AREA MGO	1 MG/ML	0	0
HIGH SURFACE AREA MGO	100 µG/ML	26.9	19.6

The bacteriophage MS2 (a simulant of a human virus) was initially propagated by inoculating a rehydrated aliquot of MS2 into a culture host of E. coli and incubating with shaking in nutrient broth. Bacteriophage replicates by infecting the host bacteria and passing their genetic code into the host cell where the cell replicates phage. In turn, the new generation of phage lyse the cell wall of their host escaping into the surrounding media, furthering the propagation of phage, the culture was centrifuged to remove cell debris and sterile filtered.

A plaque titer assay was performed to enumerate the propagated MS2 bacteriophage. The number of MS2 phage per mL in this stock culture was determined by plating E. coli host culture. Negative and positive control plates for the titer assay were performed prior to and after plating the diluted MS2 stock culture samples to provide evidence that host culture and diluent were not contaminated, and that bacteriophage were present in the MS2 stock culture.

Positive and negative control tests were performed. All high surface area MgO samples tested exhibit exhibited a formula dose-related response to the metal oxide formulation. In addition, a time of exposure-response of the bacteriophage to all three powder concentrations was evident. In the 5 minutes, the exposure test completely inhibited the MS2 bacteriophage's ability to replicate at the formula concentration of 10mg and 1 mg/ml. As for the 90 minutes exposure tests, bacteriophage inhibition was increased at the 100 ug/ml testing. It is concluded that metal oxide formations have disinfecting ability towards MS2.

d Microbials

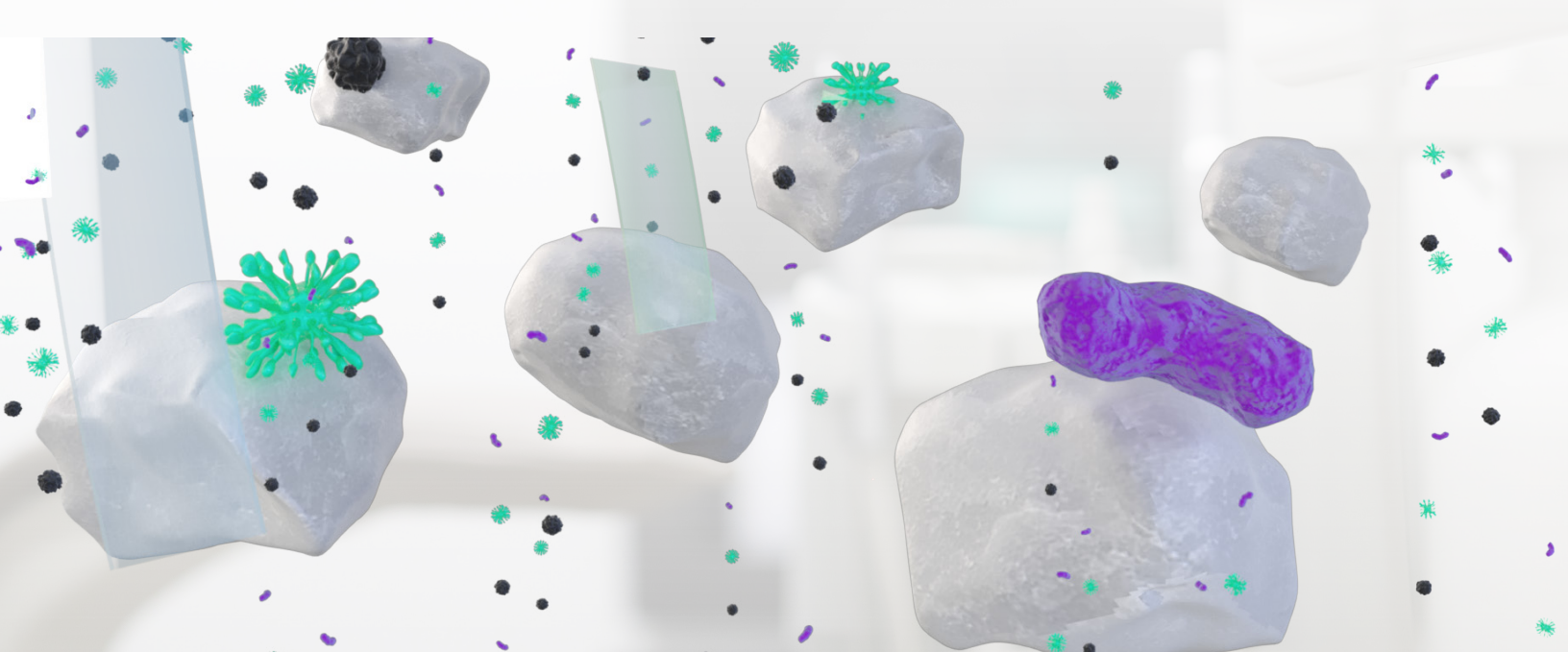
High Surface Area Zinc Oxide (ZnO)

ORGANISM	48 HOUR SUBCULTURE RESULTS			POSITIVE CONTROL	NEGATIVE CONTROL	STERILITY CONTROL
	1	2	3			
ESHERICHIA COLI ATCC # 10536	(-)	(-)	(-)	(+)	(-)	(-)
KLEBSIELLA PNEUMONIAE ATCC # 4352.	(-)	(-)	(-)	(+)	(-)	(-)

(+) Growth demonstrates that the organism was not killed

(-) No Growth demonstrates that the organism was killed

The tests were conducted using various concentrations of the high surface area Zinc Oxide for exposure to the organisms. Subculture tubes were prepared and evaluated for growth. Positive, negative, and sterility controls were also prepared. The results in the table demonstrate that the high surface area ZnO is effective against the gram-negative organisms E.coli and Klebsiella and against the gram-positive Staphylococcus aureus. This illustrates the ability of the compound to be used for inhibition of growth of bacteria.



The Solution for Your Practice's Air Quality



EnviroKlenz®

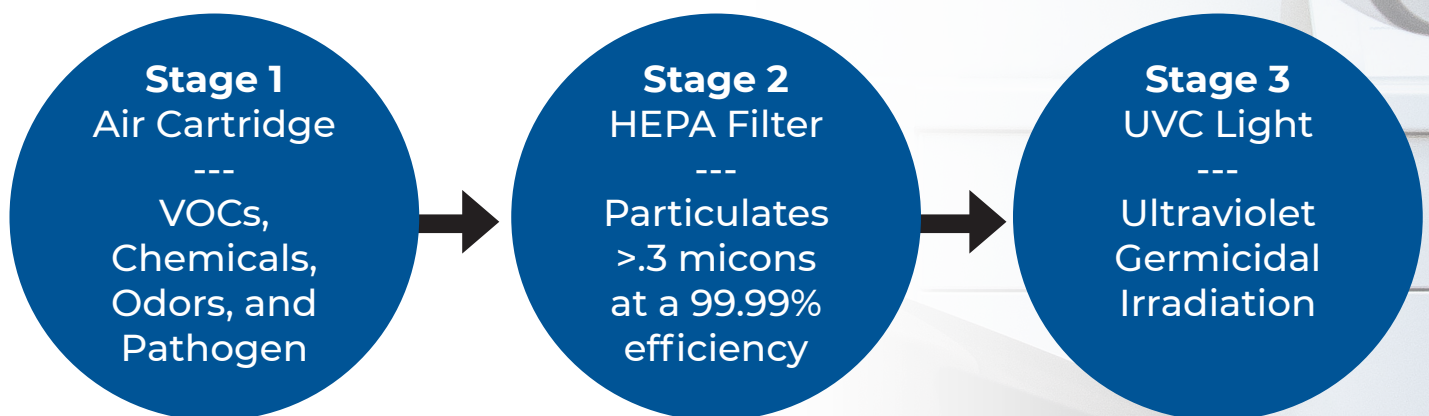
Mobile Air System with UVC



- ✓ **Powder-Coated Metal Housing**
- ✓ **Easy to Clean and Disinfect**
- ✓ **Made in the USA**
- ✓ **Medical Grade HEPA Filtration**
- ✓ **Patented Earth Mineral Technology designed to Neutralize VOCs and Odors**
- ✓ **Technology Tested and Verified by:**



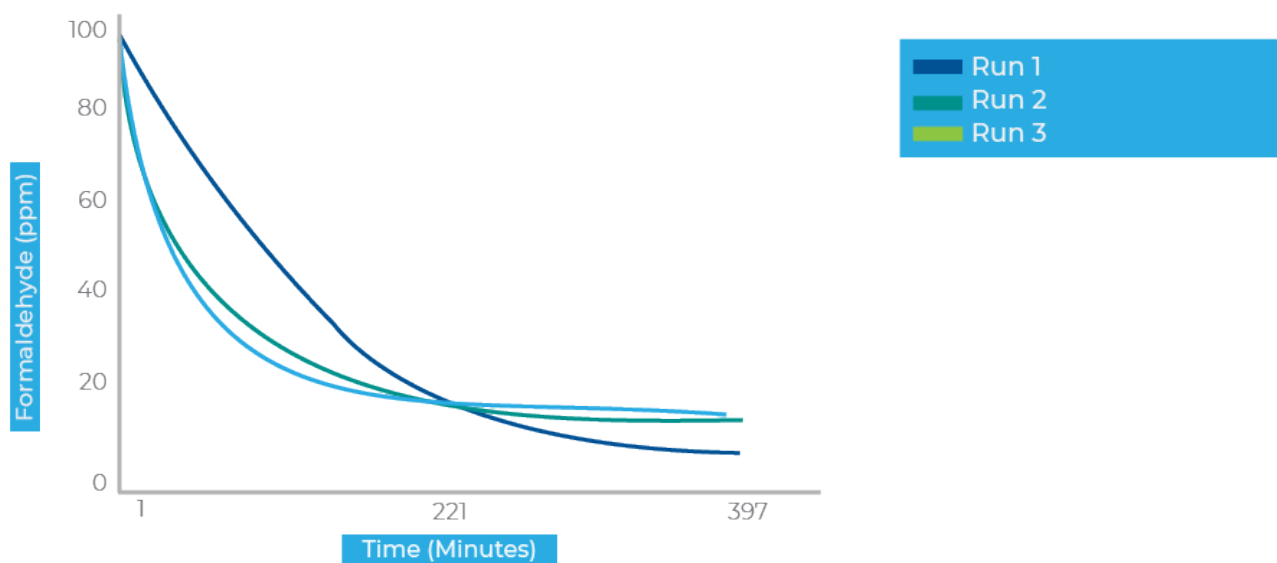
- ✓ **3-Stage Filtration**



Contact Us

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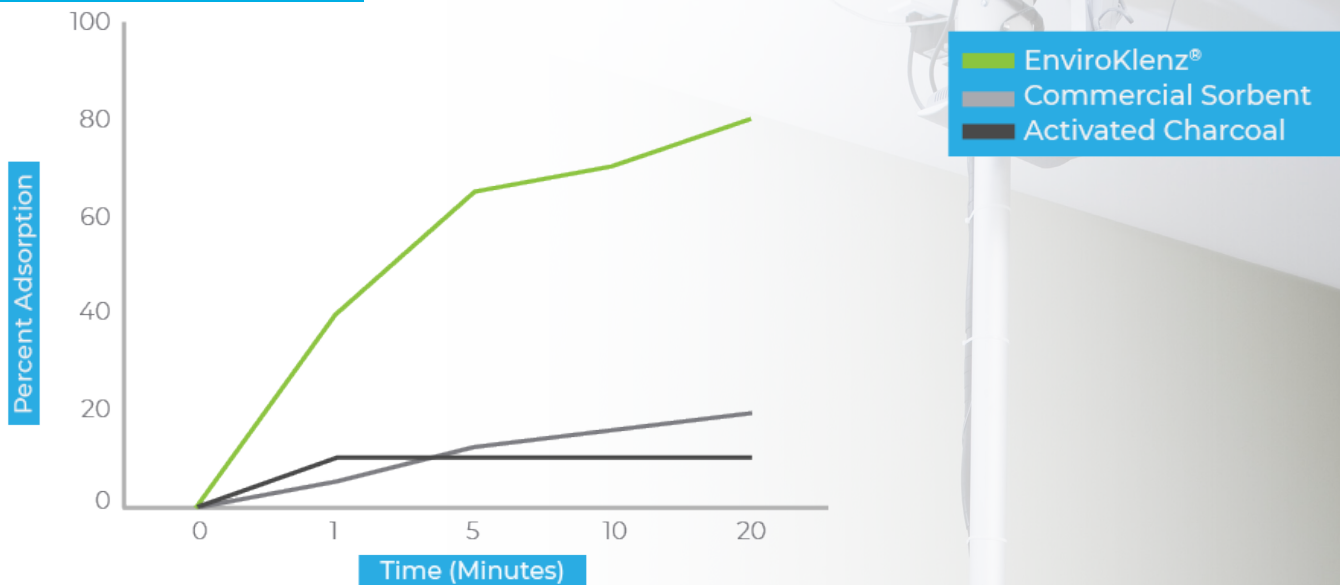
Tested and Validated



Formaldehyde (ppm) vs. Time (min)

Once the chemical contaminate is inside the proprietary EnviroKlenz® Air Cartridge, an adsorptive neutralization process occurs. This means the chemicals is retained without being released back into the environment.

Filter Replacement Cost	Air Cartridge: \$100 HEPA \$150
Filter Change-Out Frequency	Air Cartridge: Every 6 Months HEPA: Every 2 Years
Square Footage Covered	1,000 Square Feet
CFM	85, 150, 200, 250
Power	115 volts
Decibels	55, 56, 59, 62
Weight	38 lbs
Dimensions	22" x 15.5" x 15"



Percentage of Acetaldehyde Adsorbed vs. Time (min)

When acetaldehyde is adsorbed from an air stream, rapid adsorption takes place within the EnviroKlenz Material and almost none with commercial material. Note that activated carbon, a commonly used sorbent, is much less effective.

"What got my attention about EnviroKlenz is that it incorporates Medical Grade HEPA Filtration with UVC lights to kill viruses, some get caught up on the particle rating for the HEPA, but UVC lights really make all the difference in the systems effectiveness"

- Eden Dental

"I have the filter in my home, office, and son's school. One of the biggest difference I notice is that we all sleep better when the filters are running. Furthermore, we had the filters running in the office after it was painted and the carpets were changed, and that toxic smell was gone in a day and a half. The work was done Friday, and by Monday no one complained of headaches and very few people even commented that the smell of remodel was noticeable"

- Dr. Dawn Dalili

"I use this portable unit in both my home and clinic practice and feel it meets my needs in clearing mold, pet dander, toxins and other chemical debris from my home.

My clean air filtration unit of choice is EnviroKlenz Mobile air system with HEPA filters."

- Dr. Melissa Gallagher

Contact Us

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