RGF BioControls

Technical Services Bulletin



Microcon MAP (Mobile Air Purifier) - Review of Filter Replacement Schedule

The Microcon MAP is a high efficiency mobile air purifier specifically designed to remove hazardous airborne microbial particulate, reducing the risk of infectious airborne pathogen transmission in hospital and healthcare environments. Adhering to correct filter maintenance guidelines will reduce the potential spread of healthcare associated airborne infections.

Per CDC 'Guidelines for Environmental Infection Control in Health-Care Facilities':

Inadvertent exposures to environmental opportunistic pathogens (e.g., Aspergillus spp. and Legionella spp.) or airborne pathogens (e.g., Mycobacterium tuberculosis and varicella-zoster virus) may result in infections with significant morbidity and/or mortality. Lack of adherence to established standards and quidance can result in adverse patient outcomes in health-care facilities.

Life expectancy of the Microcon MAP's replaceable HEPA and Pre-filters depends on a variety of factors including the time the machine is operated, environmental conditions during operation and periods of extended storage. Monitoring the Pressure Gauge and Hour Run Meter (located on the front panel of machine) will give the best indication of filter performance and replacement frequency, however certain conditions and exposure to airborne pathogens may dictate more frequent replacement.

Pre-filters: The Pre-filter should be changed every 1 to 3 months on average*. If the MAP unit is to be stored for extended periods of the time, the Pre-filter should be replaced prior to storage**. If the MAP unit is utilized in the treatment of a patient with confirmed infectious disease the Pre-filter should be replaced immediately after use***.

HEPA Filter: The HEPA filter should be replaced every 12 months on average when the MAP is used in continuous service however, the replacement time can be governed by the Minihelic Pressure Gauge[^]. If the MAP unit is to be stored for extended periods of time, the HEPA filter should be replaced prior to storage. If the MAP unit is utilized in the treatment of a patient with confirmed infectious disease the HEPA filter should be replaced immediately after use.

- *Replacing the Microcon MAP Pre-filter at regular intervals will extend the life expectancy of the HEPA filter. Pre-filter should be regularly inspected and replaced with visual sign of dust.
- **Storing the Microcon MAP for extended periods after use eliminates air flow or drying of the filters, providing moist, dark conditions ideal for mold and bacteria growth through the filter. If any sign of odor is noted after restarting the MAP all filters should be replaced. Preferably filters should be changed prior to storage.
- ***Replacement of filters after contact with known airborne pathogen is recommended based on the potential for mold and bacteria growth in unused HEPA filters, and the potential for exposure to immunocompromised population.

^See system operations manual for filter pressure gauge readings. For Microcon MAP400 replace HEPA with Pressure Gauge reading of >0.8". For Microcon MAP800 replace HEPA with Pressure Gauge reading of >1.0".

See over for Filter Replacement chart

RGF BioControls Microcon® Filter Replacement Chart

	Replacement Rate			
Model	Pre-filter	HEPA Filter	Carbon	UV Lamps
Microcon MAP400	1-3 months	12 months	12 months	12 months
Microcon MAP800	1-3 months	12 months	12 months	12 months
Microcon ExC7	1-3 months	12 months	12 months	12 months
Microcon WallMAP	1-3 months	12 months	12 months	NA

Pre-filter - Inspect Pre-filter regularly for dust build-up. Replace Pre-filter 1 to 3 months or if color change from Blue to Grey is noted

HEPA Filter - Annual replacement only if filter is used in continuous service. For intermittent use refer to attached bulletin or Operations Manual

Activated Carbon - Optional filter used for odor control. Use 2x Carbon pads for best performance and replace as often as needed

UV Lamps - Optional feature used for germicidal protection. Replace around 8,000 hours or annually

Microcon® Filter Replacement Parts

Model	Part #	Description	
MAP400	HS-042	Blue Cube HEPA (99.97% 0.3 Micron)	
MAP400	PF-042	Pre-filter (24/cs)	
MAP400	CF-042	Activated Carbon (2/cs)	
MAP400	UB-042	UV Lamps (Set of 4)	
Isoport MAP400	FC-042	Isoport MAP400 HEPA (99.97% 0.3 Micron)	
MAP800	HS-082	Blue Cube HEPA (99.97% 0.3 Micron)	
MAP800	PF-082	Pre-filter (24/cs)	
MAP800	CF-082	Activated Carbon (2/cs)	
MAP800	UB-082	UV Lamps (Set of 4)	
ExC7	HAL-EXC	HEPA (99.97% 0.3 Micron)	
ExC7	PF-EXC	Pre-filter (12/cs)	
ExC7	CF-EXC	Activated Carbon (2/cs)	
ExC7	UB-002	UV Lamps (Set of 4)	
WallMAP	HL-022	HEPA (99.97% 0.3 Micron)	
WallMAP	PF-EXC	Pre-filter (12/cs)	
WallMAP	CF-022	Activated Carbon (2/cs)	

For customer support email: biocontrols@rgf.com or call 1-800-842-7771 or click www.rgf.com/rgf-biocontrols

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