

Which filters should be used against COVID-19

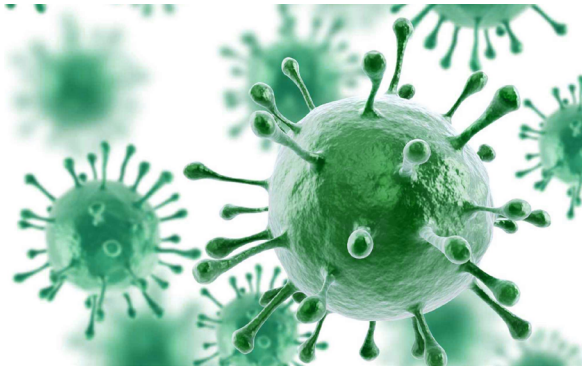
Can HEPA filters capture the Coronavirus?

Regarding the Coronavirus (COVID-19) epidemic, the most common question asked about filtration is: can HEPA filter capture the viruses?

The answer to the question is Yes

HEPA filters capture viruses within their efficiency value.

HEPA filters; uses in hygienic application such as hospitals, pharmaceutical factories, food and beverage production facilities. in hospital, especially operating rooms, intensive care rooms, isolation rooms, biosafety cabinets are the usage areas.



Particulate Matter (PM)

In the atmosphere, industrial dusts, pollen, spores, bacteria, molds, respirable particles, various fumes and contaminants such as viruses with different particle sizes called "particulate matter" are exist.

Indoor air quality (IAQ)

In order to achieve the desired indoor air quality, the first thing that needs to be done is to have efficiency filtration by considering the dimension of the pollutants.

Particle (Virus) size

Particles of 1 micron or smaller sizes pose a greater risk for human health. the sizes of viruses among these pollutants, which we refer to as particulate matter, are in the range of 0,02 to 0,4 microns. Coronavirus is in the size range of 0,08 to 0,16 microns.



Particles dimension in µm	0,001	0,01	0,1	1	10	100	1000
Air pollutants	gas molecule	virus metal oxides fume	oil mist cigarette	inhalable particle bacteria	cinder mold spores	airborne pollution cement dust pollen	industrial particle
Filtration method	activated carbon filters	ULPA, HEPA ed EPA filters		medium/fine filters		coarse filters	

Filter Group	Class	MPPS		Vefim Series
		Efficiency %	Penetration %	
EPA	E10	85	15	FAE10
	E11	95	5	FA11
	E12	99,5	0,5	FA12
HEPA	H13	99,95	0,05	FA13
	H14	99,995	0,005	FA14
ULPA	U15	99,9995	0,0005	FA15
	U16	99,99995	0,00005	FA16
	U17	99,999995	0,000005	FA17