

How Copernicus' True HEPA Air Purifier filters particles less than 0.3microns

1

HEPA Filters are evaluated by their efficiency at filtering particles of 0.3microns (micrometers). This particle size is selected for evaluation because it is the most difficult particle size to effectively filter. It is known as the Most Penetrating Particle Size (MPPS). That is why you see a dip in the chart at the MPPS line.

2

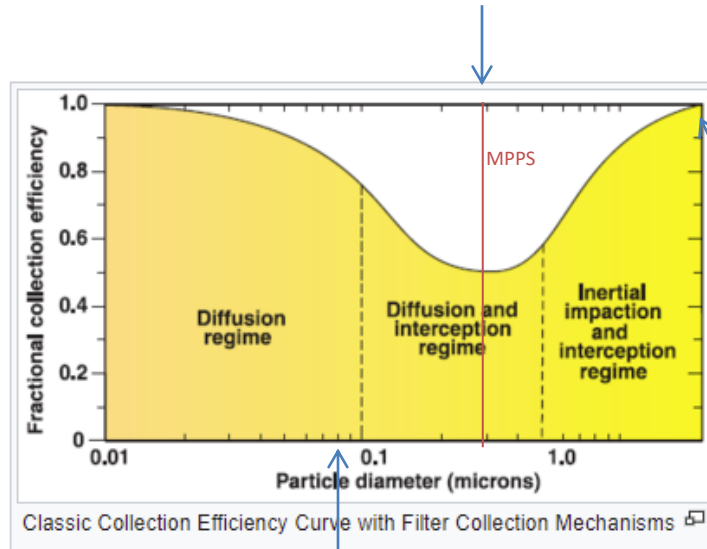
Choosing the most difficult particle size to filter does not mean that particles smaller than 0.3microns do not get filtered out—it is the opposite—MPPS's efficiency increases as particles get smaller or larger. That is why you see the Fractional Collection Efficiency axis increase on either side of the chart.

On one end of the spectrum, small particles like bacteria and viruses are filtered, and on the opposite side of the spectrum, larger particles like pollen are filtered out. Both filter these particle sizes more efficiently than the MPPS.



3

Filters must achieve at least a 99.97% efficiency at filtering the MPPS in order to be classified as "True HEPA" filters. The 99.97% rating is based on 0.3microns.



The Coronavirus is in the size range of 0.08 to 0.16 microns and is captured in True HEPA filters.