

# ISO16890 standard

ISO 16890 has been the international standard for air filters since the end of 2016



## Practical and realistic

The ISO 16890 standard focuses on the size of fine dust particles (ePM, in other words, efficiency Particulate Matter) rather than on filter performance.

The advantage: a practical and realistic criterion.

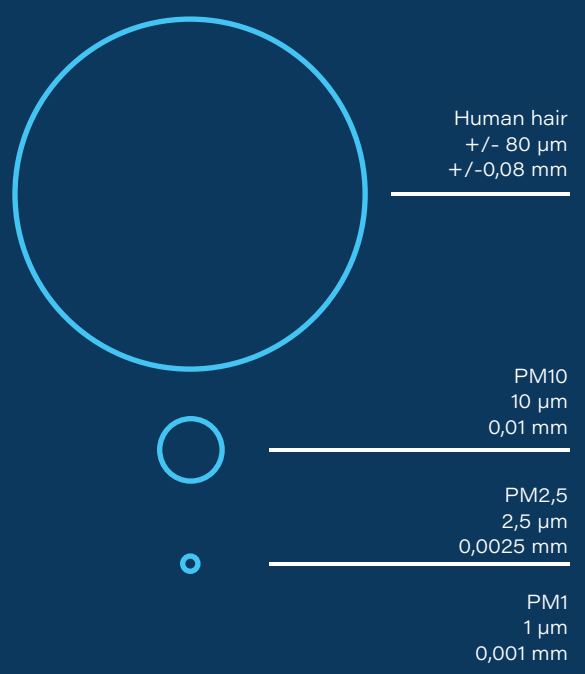
## Particle sizes

Filter efficiency will be determined based on the groups PM1, PM2.5, and PM10. These indicate the different sizes of fine dust particles.

This classification is similar to the groups used by the World Health Organisation (WHO) and other authorities.

Based on these groups, it is easier for users to select a suitable air filter based on practical use.

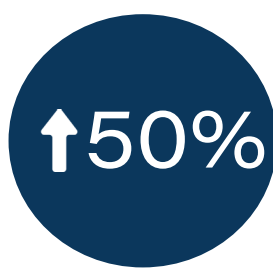
### HOW BIG IS A MICRON?



## Classification in ISO groups



The requirement for classification is that a filter must capture at least 50% of the particle size in question, both in loaded and unloaded states.



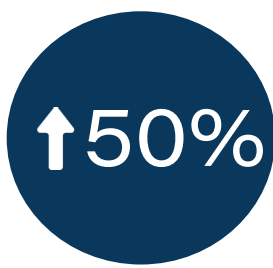
If a filter captures > 50% of the relevant particle size, then it will be classified in that group.

For example: ePM10 60%



In addition, the percentage efficiency within the group will be mentioned. This percentage is rounded off to 5%.

For example: ePM1, 87% will be ePM1, 85%



If a filter captures < 50% PM<sub>10</sub> particles, then it will be classified as ISO coarse followed by the % efficiency.

For example: Coarse 60%



A filter that achieves more than 50% efficiency in several groups will be classified in all the groups concerned.

## ISO 16890 standard

- ✓ Particle sizes from 0.3 µm to 10 µm
- ✓ Filter choice based on practical use
- ✓ Four ISO groups: ISO ePM<sub>1</sub> + ISO ePM<sub>2,5</sub> + ISO ePM<sub>10</sub> + ISO Coarse



All filters in the TOPS range will, of course, be tested and classified in accordance with ISO 16890.

Detailed explanations and additional information can be found at:

[www.topsluchtfilters.nl/en/standards/iso16890/](http://www.topsluchtfilters.nl/en/standards/iso16890/)