

Activated Carbon: Activated carbon, also called activated charcoal or activated coal, is a form of carbon that has been processed to make it extremely porous with a large surface area available for absorption or chemical reactions. Commonly used in air purifiers for odor absorption of many airborne pollutants.

AEON Blue Technology: The highly-effective, 5 & 6 multi-level filtering system depending on ideal. model, frees the air from the smallest particles and pathogens before they can reach our respiratory system (1. prefilter, 2. CleanCel®, 3. HEPA, 4. activated carbon, 5. PlasmaWave™, and 6. MedShield) cleaning.

AHAM Certification: Recognized by the EPA, AHAM, the Association of Home Appliance Manufacturers, independently tests and rates air cleaning products based on the Clean Air Delivery Rate (CADR) or the amount of particulate that is filtered by the appliance. This helps to identify the efficiency of the products by room size so that you can make sure you are purchasing an air cleaner that will suit your home needs. AHAM administers a voluntary Room Air Cleaner Certification Program for portable household electric room air cleaners.

ARB (Air Resources Board): Certified by the California Air Resources Board for zero ozone emissions (sometimes called CARB).

CADR (Clean Air Delivery Rate): signifies the amount of clean air delivered by an air purifier. Three numbers are usually listed for each air purifier (tobacco smoke, pollen, dust). The higher the tobacco smoke, pollen and dust numbers, the faster the unit filters the air. The CADR determines how well an air purifier reduces these pollutants.

CARB (California Air Resources Board): Certified for zero ozone emissions.

CFM or Cubic Feet per Minute: The amount of air, in cubic feet, that flows through a given space in one minute.

CleanCel: The entire filter cassette and prefilter are treated with CleanCel®, a patented, antimicrobial coating, which prevents the growth of odor-forming bacteria, mold and fungi.

ECARF: The ECARF quality seal intends to make daily life easier and more manageable for allergy sufferers. The seal emphasizes the fact that a product or a service specifically addresses the needs of those affected, with a focus on practicability and user friendliness. The ECARF Institute is an organization within the European Center for Allergy Research Foundation based at the Charité in Berlin, Germany.

Energy Star: Certified as 40% more energy efficient, without sacrificing performance.

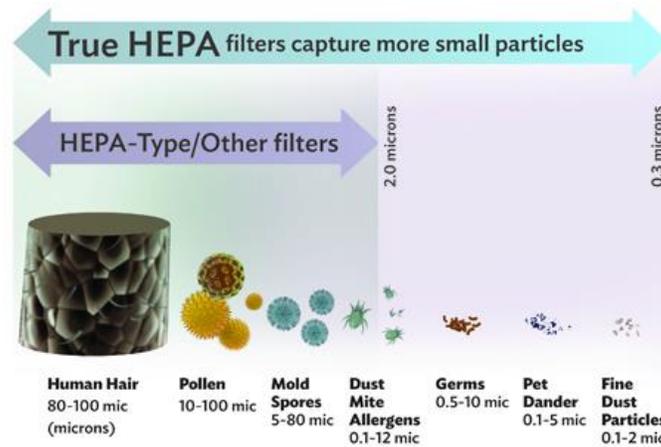
EPA (Environmental Protection Agency): created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.

FCC (Federal Communications Commission): an independent agency of the US government to regulate interstate communications by radio, television, wire, satellite, and cable.

HEPA (High Efficiency Particulate Air): filters 99.97% of particles as small as 0.3 microns. Can also capture 95-99% of particles below 0.3 microns (easily meeting PM2.5 standards). HEPA filters are a mainstay in areas that require clean air such as hospitals, clean rooms, and high-tech manufacturing plants.

MedShield: Antibacterial coating (orange stuff) on the HEPA (AP40) or PM2.5 (AP100) filters that inhibits the growth of microbes and removes pathogens.

Micron (μm): A unit of length. One Micron = 39 millionths of an inch. Contaminant size is usually described in microns. Relatively speaking, a grain of salt is about 60 microns and the eye can see particles to about 25 microns. A micron is also known as a micrometer.



Common household particles and their relative size:

0.3 - 1 micron = Tobacco Smoke, Bacteria, Metallic Fumes

1 - 5 microns = Bacteria and Small Dust Particles

5 - 10 microns = Mold, Pollen, Medium Dust Particles

10 microns = Large Dust Particles

25 microns = Debris and Dust Particles (visible to the naked eye)

150 microns = Human Hair

OptiFlow Technology: the optimized air flow captures particles and distributes fresh air through the room quietly

Ozone: An unstable derivative of oxygen, O₃, that is formed naturally in the ozone layer from atmospheric oxygen by electric discharge or exposure to ultraviolet radiation. It is a highly reactive oxidizing agent used to deodorize air, purify water, and treat industrial waste. ideal. models are ozone free. See PlasmaWave.

PlasmaWave™ certified as being free of ozone, produces positive and negative ions in an optimal ratio that form hydroxyls together with hydrogen from the humid air. These hydroxyls neutralize and destroy viruses such as influenza viruses, bacteria, chemical compounds, poisons and odors at the molecular level (basically, the air is drawn through an electrical field, as the particles in the air pass through, an electronic charge is given to them. The charged particles are then attracted to a series of flat plates with an opposite electrical charge). This ionization process usually causes a small amount of ozone to be created, but through PlasmaWave Technology ideal. air purifiers are certified as being free of ozone.

PM2.5 filter: filters ultra-fine air pollutants of a size of 2.5 microns (the anti-bacterial coating (orange stuff) on the AP100 PM2.5 filter also inhibits the growth of microbes and removes pathogens).

Pre-filter: A filter used in many air purifiers that is designed to capture particles 1 micron in size and larger. Some air purifiers use activated carbon as their pre-filter to remove odors and gases. A pre-filter will extend the life of a HEPA filter.

UL (Underwriters Laboratories) listed: Meets stringent standards for product safety and supply regulatory compliance.

VOCs (Volatile Organic Compounds): Volatile organic compounds (VOCs) are organic chemical compounds that have high enough vapor pressures under normal conditions to significantly vaporize and enter the atmosphere. Volatile organic compounds are numerous and varied. Although abundant in nature and modern industrial society, they may also be harmful or toxic.