

Best Air Purifiers For VOCs And Formaldehyde Removal

By **Patrick Holmes**

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Are you concerned about the level of toxic chemicals in your indoor air?

Are you looking for the best air purifier for VOCs and formaldehyde to get rid of these unhealthy pollutants?

If so, you've landed on the right page.

Below you'll find the most in-depth guide and expert reviews on air purifiers that are designed to remove VOCs and formaldehyde gases.

By choosing one of the best air purifiers for VOC removal on this page, you'll not only save yourself hours of research, but you'll also get a unit that's guaranteed to remove up to 99% of these invisible pollutants.



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Buying Guide for Air Purifiers for VOCs and Formaldehyde

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Best Air Purifiers for VOCs and Formaldehyde Reviewed in This Guide

Here's a quick comparison chart showing the top air purifiers for VOCs and formaldehyde. We'll cover each aspect of these units in the reviews section below, but this gives you an idea of what's available and an easy way to compare them.

Image	Air Purifier Details	Price
	<p><u>IQAir GC MultiGas Air Purifier</u></p> <ul style="list-style-type: none"> • Best overall air purifier • 12 lbs. of Activated Carbon • Coverage: 1,125 sq. ft. 	CHECK PRICE

Image	Air Purifier Details	Price
	<p><u>Austin Air HealthMate Plus Air Purifier</u></p> <ul style="list-style-type: none"> • Best value with powerful performance • 15 lbs. of Activated Carbon • Coverage: 1,500 sq. ft 	CHECK PRICE
	<p><u>Molekule Air Purifier</u></p> <ul style="list-style-type: none"> • Destroys VOCs and formaldehyde at the molecular level • Uses PECO nanotechnology • Coverage: 600 sq. ft. • Wi-Fi enabled 	CHECK PRICE
	<p><u>Molekule Mini Air Purifier</u></p> <ul style="list-style-type: none"> • Smaller version of the Molekule model • Uses PECO nanotechnology • Coverage: 250 sq. ft. • Wi-Fi enabled 	CHECK PRICE
	<p><u>Airpura F600 Air Purifier</u></p> <ul style="list-style-type: none"> • Thickest filter for VOCs available • 18 to 26 lbs. of Activated Carbon • Coverage: 2,000 sq. ft. 	CHECK PRICE
	<p><u>AIRMEGA 400S Air Purifier</u></p> <ul style="list-style-type: none"> • Top Wi-Fi air purifier for VOC removal • Dual Activated Carbon filters • Coverage: 1,560 sq. ft. • Wi-Fi enabled 	CHECK PRICE

Image	Air Purifier Details	Price
	<p data-bbox="391 146 721 178"><u>Blueair 605 Air Purifier</u></p> <ul data-bbox="423 225 854 406" style="list-style-type: none"><li data-bbox="423 225 854 257">• Good option with filter upgrades<li data-bbox="423 278 821 310">• 2-4 lbs. of Activated Carbon<li data-bbox="423 331 721 363">• Coverage: 700 sq. ft.<li data-bbox="423 385 639 406">• Wi-Fi enabled	CHECK PRICE
	<p data-bbox="391 470 821 502"><u>Levoit LV-PUR131 Air Purifier</u></p> <ul data-bbox="423 549 914 778" style="list-style-type: none"><li data-bbox="423 549 914 629">• Cheapest air purifier for VOCs and formaldehyde<li data-bbox="423 651 914 683">• 1-inch thick Activated Carbon filter<li data-bbox="423 704 721 736">• Coverage: 360 sq. ft.<li data-bbox="423 757 756 778">• Wi-Fi version available	CHECK PRICE

Best Air Purifiers for VOCs and Formaldehyde List

1. IQAir GC MultiGas Air Purifier

If you want the best air purifier for VOCs and formaldehyde, then you need the IQAir GC MultiGas.

IQAir has made a special air cleaner for the very purpose of removing toxic airborne chemicals and gases.

The IQAir GC MultiGas air purifier comes with a **high-quality filtration system** that includes:

- MultiGas Cartridges:** These filters are an exception because they remove a wide range of airborne chemical pollutants such as VOCs (volatile organic compounds), formaldehyde, odors, and tobacco smoke. The cartridges include an impressive 12 lbs. (5.4 kg) of granular Activated Carbon impregnated with Alumina for gas and odor control. This thick bed of Activated Carbon allows the filter to last around 2 1/2 years.
- HyperHEPA Filter:** This filter adds an additional layer of protection to your indoor air quality. It captures 99.97% of all particles that exist, including ultrafine particles, bacteria, and viruses. The size of this filter allows it to last around 12 months before a replacement is needed.
- Post-Filter Sleeves:** These electrostatically charged sleeves are wrapped around each MultiGas cartridge to make sure that ultrafine particulate matter doesn't escape from the air purifier. This keeps all trapped particles, VOCs and formaldehyde locked into the cartridge. No other air purifiers on the market offer this level of advanced air cleaning protection. The sleeves last around 2 1/2 years.

As you can see, this combination of filters removes the most harmful chemicals, gases, and pollutants from the air you breathe.

As for room size coverage, this air purifier can handle rooms **up to 1,125 square feet** and clean the air two times each hour (or every 30 minutes).

If you want faster even more efficiency from this unit, then you could use it in a room half that size (560 sq. ft.) and boost the air cleaning power to four times per hour (or every 15 minutes).



The IQAir GC MultiGas is a top choice for anyone with Multiple Chemical Sensitivity (MCS) and it's highly recommended by experts for its unrivaled protection against airborne gases and chemicals.

[Check Price and Reviews](#)

[2. Austin Air HealthMate Plus Air Purifier](#)

The next best air purifier for VOC removal is this unit right here.

What makes it so powerful against airborne gases, chemicals, and other contaminants is the **4-stage air filtration system** that includes:

- **Pre-filter:** For capturing large particles and debris.
- **Medium Filter:** For trapping small to medium size particles.
- **True HEPA Filter:** For capturing 99.97% of particles down to 0.3 microns in size, such as dust, allergens, pet dander, mold spores, and bacteria.
- **Activated Carbon Filter:** For removal of VOCs and formaldehyde. It contains nearly 15 lbs. of Activated Carbon in a very thick filter to trap as many pollutants as possible that flow through it.



Another impressive feature of this unit is that it draws air in through all four sides, making it a **360-degree air filtering machine**. This design maximizes the efficiency of VOC removal.

What's even better is that the internal filters have a **5-year life expectancy** which makes it one of the most affordable air purifiers to own and maintain.

Finally, this air purifier covers very large rooms **up 1,500 sq. ft.** That's more than enough power to protect even the largest room in a single-family home or office building from harmful VOCs.

The only drawback to this air purifier is that it doesn't have any automatic features. You have to manually control the fan speed settings with a dial.

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[3. Molekule Air Purifier](#)

(Use our link and get \$150 OFF between 11/22 to 12/2)

How would you like an air purifier for VOCs and formaldehyde that actually destroys—*not traps*—these pollutants at a molecular level?

If you want a unit that can eliminate all traces of VOCs that pass through the system, then you'll want to consider this Molekule air purifier here.



It's unlike any other air purifier reviewed on this list because it uses **advanced PECO filtration technology**.

- PECO filtering is not just a temporary solution like Activated Carbon filtration. PECO destroys airborne VOCs at their core so they vanish while Activated Carbon collects them on the surface of the material.
- PECO nanotechnology also destroys allergens, mold, bacteria, and viruses so you have the cleanest, healthiest air to breathe.

Additionally, this air purifier is designed for large rooms **up to 600 square feet**, so it's good for master bedrooms, living rooms, family rooms, and basements.

It also comes with a **leather handle** so you can easily move it from room to room.

The **touch screen display** on the top of the unit allows you to make adjustments to the fan speeds and automatic modes of the air purifier. Or you can choose to sync it up with your iPhone or Android device for **full control over Wi-Fi**.

As an added design element, a **blue light** shines out of the top of the unit to provide a nice glow at night. However, the blue light is there for more than just looks. It uses low-energy ultraviolet (UV-A) light to initiate the catalytic reaction that destroys pollutants.

The mobile app is also a nice touch because it gives you real-time monitoring of the internal air filters. That way, you know how much life and efficiency is left before a replacement is needed.

If you want to ~~completely destroy any and all~~ airborne pollutants in your indoor air, you won't find anything [Check Price and Reviews](#)

[4. Molekule Mini Air Purifier](#)

(Use our link and get \$80 OFF between 11/22 to 12/2)

If you liked the idea of our #3 review, but wanted something a bit smaller or portable, then this Molekule mini version could be the right choice for you.

It offers all of the same air cleaning power as the standard unit with **PECO nanotechnology**, but only handles rooms **up to 250 square feet**.

That smaller size makes this device best suited for areas in studio apartments, bedrooms, and home offices.

A few other difference include:

- Fabric strap instead of a leather one.
- No blue light; however, a UV-A light is still a part of the product design and PECO technology. You just can't see it.
- No digital display on the top of the unit; however, a button does exist. This model is really designed to be controlled through your mobile device with the Wi-Fi app.



If you want to save some money while still getting the advanced air cleaning power of PECO nanotechnology, then this Molekule mini air is what you need.

Check Price and Reviews

[5. Airpura F600 Air Purifier](#)

If you liked the idea of our #2 air review, but want even more protection with an air purifier for VOCs and formaldehyde, then you'll want to consider this unit by Airpura.

The Airpura F600 looks very similar to the Austin Air model, except that it has a round design and the internal filters are much different.

With this air purifier, you can choose between **18 to 26 lbs. of Activated Carbon** to meet your air quality needs. This equates to a 3-inch thick filter that's unmatched in the marketplace. (It lasts up to 2 years.)

The Activated Carbon filter collects chemical pollution stemming from formaldehyde, ammonia, smoke, pesticides, glues, adhesives, and other building and construction materials that emit VOCs.

There's also a **1-inch thick pre-filter** that traps numerous airborne particles that pollute your indoor air.

And the final layer of filtration is a **HEPA filter** to trap carbon dust and allergen particles to provide a more thorough level of clean.

Best of all, this air purifier covers **up to 2,000 sq. ft.** of space. You can't get any bigger than that.

If you want to restore the health of your environment and eliminate formaldehyde and VOCs in a large residential or commercial spaces, then this is a top choice.



The only reason we rated it #3 is that it's often out of stock because it's in such high demand. However, the Austin Air HealthMate Plus reviewed above is a good substitute.

Check Price and Reviews

6. AIRMEGA 400S Air Purifier

How would you like an air purifier for VOC removal that offers the convenience of **Wi-Fi control**?

If that sounds good to you, then this AIRMEGA 400S will meet all of your indoor air quality needs and more.

With the **mobile application** you get:

- Full control through a smartphone or tablet
- Indoor and outdoor air quality monitoring
- Filter change notifications
- Scheduling
- Alexa voice control

As for the **internal filters** for cleaning the air, you get:

- **Pre-filter:** Traps the largest pollutants, like dust, hair, and dirt, in a fine micromesh material. This filter also works to extend the life of the main filter, called the Max2 filter.
- **Max2 Filter:** This is a highly specialized filter that combines two air cleaning technologies in one:
 - **True HEPA Filter:** Captures 99.97% of ultrafine particles down to 0.3 microns in size.
 - **Activated Carbon Filter:** Reduces 99% of VOCs and fumes such as NH₃ and CH₃CHO which are toxic to your health.

The only thing to keep in mind about this air purifier is that the filters are not as thick as other units reviewed on this page. Therefore, you can expect to replace it every 12 months or so.



But, for the added convenience of smart Wi-Fi controls, it can be well worth it.

A few **other stand out features** worth mentioning include:

- **Instant Air Quality Indicator:** Know exactly how clean or polluted your indoor air is just by looking at the unit. Displayed as a colored ring: Blue= Good, Purple = Moderate, Pink = Unhealthy, Red = Very Unhealthy
- **Dual Sided Suction:** Air is pulled into the unit from two sides to clean it faster and more efficiently.
- **Eco Mode:** Saves on energy and extends the life of the internal filters. The unit automatically turns off when it senses that the air quality is good for 10 minutes or more. Once air quality drops, the unit will automatically turn back on again.

And finally, the AIRMEGA 400S can cover large rooms **up to 1,560 square feet**, which is more than enough for most indoor applications.

All-in-all, this is a good air purifier for the money if you want to protect yourself from the presence of VOCs and other indoor contaminants.

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7. Blueair 605 Air Purifier

This is another good **Wi-Fi air purifier** for VOC removal that works with any iOS or Android device.

What makes Blueair 605 air purifier outstanding is the fact that it can **clean the air 5 times per hour** in a room up to **700 square feet**. That's quite impressive!

This unit also has a special **HEPASilent technology** that combines electrostatic and mechanical filtration technologies. This combination creates a whisper-silent operation while



still achieving a 99.7% filtration efficiency of airborne particles down to 0.1 microns in size.

The only thing you have to keep in mind here is that the Blueair 605 air purifier doesn't automatically come with the **SmokeStop filter** for VOC removal; you have to [add that on as an upgrade](#).

But when you do, you'll get approximately **2-4 lbs of Activated Carbon** that's been formulated with magnesium dioxide and copper oxide to trap dangerous chemicals and odors.

Another add-on feature is the Blueair **DualProtection filter** with powdered, high-porosity coconut carbon. By adding this additional layer to your unit, you can experience up to four times faster VOC and formaldehyde removal.

As you can see, Blueair has developed a customizable air purifier that can meet the needs of every consumer whether they have Multiple Chemical Sensitivity (MCS) or not.

You can essentially make this unit as powerful as you want by choosing the various upgradable filters.

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[8. Levoit LV-PUR131 Air Purifier](#)

Our next recommendation is for people who want an air purifier for VOCs and formaldehyde that's made for smaller rooms.

This Levoit model can handle a space **up to 360 square feet**.

Inside you'll find:

- **Pre-filter:** This filter collects the largest particles and extends the life of the other internal filters.



- **True HEPA Filter:** This filter offers the added benefit of capturing 99.97% of ultrafine contaminants for cleaning air to breathe.
- **Activated Carbon Filter:** This filter is about 1-inch thick and reduces VOCs, formaldehyde, and other chemical vapors.

This air purifier can also be upgraded to the [Levoit LV-PUR131S Wi-Fi version](#) for just a few dollars more.

And similar to our #4 air purifier review, the LV-PUR131S model offers the added convenience of:

- Full control through a smartphone or tablet
- Indoor air quality monitoring
- Filter change notifications
- Scheduling
- Alexa voice control

If you're looking for an affordable air purifier for VOCs and formaldehyde removal, then you won't find anything better than this unit.

[Check Price and Reviews](#)

Buying Guide for Air Purifiers for VOCs and Formaldehyde

What are VOCs?

Volatile Organic Compounds or VOCs are chemicals that are released into the air in the form of gases and vapors from household products such as paints, varnishes, air fresheners, cleaning products, carpeting, adhesives, glues, furniture, particleboard or MDF, and other construction materials.

VOCs are also released tobacco smoke, cooking, and burning wood.

The most common VOCs are formaldehyde, benzene, ethylene glycol, methylene chloride, tetrachloroethylene, toluene, xylene, and 1,3-butadiene.

What is Formaldehyde?

Formaldehyde is a colorless, flammable gas with a strong odor that's used to make building materials and many household products.

Formaldehyde is commonly used in pressed-wood products, such as particleboard, MDF, plywood, and fiberboard; permanent-press fabrics; paper product coatings; glues and adhesives; and certain insulation materials.

Over time, formaldehyde off-gasses into the air and creates indoor air pollution.

When formaldehyde is present in the air at levels exceeding 0.1 ppm, some people may experience health effects such as burning sensations in the eyes, nose, and throat; coughing; wheezing; or nausea.

In 1987, the U.S. Environmental Protection Agency (EPA) classified formaldehyde as a probable human carcinogen under conditions of unusually high or prolonged exposure.

What is MCS?

Multiple Chemical Sensitivity or MCS is a chronic, physical illness that affects many people. It causes individuals to have allergic-type reactions to very low levels of chemicals that come into contact with their eyes, nose, throat, lungs, or skin.

The most common symptoms of MCS include:

- Headaches
- Rashes
- Asthma
- Muscle and joint aches
- Fatigue
- Memory loss
- Confusion

Top Technologies That Filter Out VOCs and Formaldehyde

If you're serious about getting rid of VOCs and formaldehyde from your indoor air, then you need to look for one of these two air cleaning technologies below. No other air filtration types will work for airborne gases and chemicals.

- **Activated Carbon Filter:** This special filter is the only one that can trap VOCs and formaldehyde pollutants. Activated Carbon is a form of carbon that has been processed with oxygen to create millions of tiny pores that increase the surface area of the material. In this new state, Activated Carbon becomes an excellent filter for adsorption of chemicals and gases. The key to getting a good air purifier for VOCs and formaldehyde is to buy one that has a deep layer or multiple pounds of Activated Carbon. The thicker and heavier this filter is, the more efficient it is for trapping chemical vapors and gases.
- **PECO Technology:** PECO is short for “Photoelectrochemical Oxidation” and it’s a new air purification technology that’s designed to destroy organic matter that’s not trapped by traditional air filters, such as VOCs and formaldehyde. PECO is a proprietary technology by Molekule, so you won’t find it on any other air purifier brand. What makes PECO so effective against gas vapors and chemicals is that it works at the molecular level to destroy these types of pollutants—not just trap them on the surface of a filter.

What is a VOC Sensor?

A VOC sensor on an air purifier will monitor the air quality for VOC particulates and gases. And when these pollutants are detected, the air purifier will automatically adjust the fan speed setting to remove chemicals from the air.

If the air purifier you own doesn’t have a VOC sensor, you can purchase a separate unit to monitor and detect VOCs in the room. The common name for this type of VOC monitor is called a ” TVOC and Formaldehyde Sensor”.

Room Size Coverage Considerations

Every air purifier is designed to clean the air inside a room up to a certain size. And this size is referred to as the total “square footage” or “sq. ft.”

When you’re shopping for an air purifier for VOCs and formaldehyde, you want to get a unit that can meet or exceed the square footage of the room you’re going to use it in.

For example, if you’re placing the air purifier in a large room that’s 20’ x 40’, then you’ll need a unit that can handle at least 800 sq. ft. ($20 \times 40 = 800$).

If you’re using the air purifier in a small room that’s 15’ x 20’, then you’ll need a unit that can handle at least 300 sq. ft. ($15 \times 20 = 300$).

It's always better to get an air purifier that's overpowered for a room versus a unit that's underpowered.

If it's underpowered then the air purifier won't remove VOCs and formaldehyde very well. But if it's overpowered, then it will work at a more efficient rate.

Common Questions About Air Purifiers and VOCs

Do Air Purifiers Help with VOCs?

Yes, air purifiers can help with VOCs, but only if they contain an Activated Carbon filter or PECO technology.

Activated Carbon air filters trap VOCs on the surface of the filter while PECO technology destroys VOC particulates as they pass through the system.



Which Air Purifier Removes VOCs?

There are currently eight units that are considered the best air purifiers for VOCs:

1. IQAir GC MultiGas Air Purifier
2. Austin Air HealthMate Plus Air Purifier
3. Airpura F600 Air Purifier
4. AIRMEGA 400S Air Purifier
5. Blueair 605 Air Purifier
6. Levoit LV-PUR131
7. Molekule Air Purifier
8. Molekule Mini Air Purifier

Each one of these air purifiers is reviewed on this page to help you make the right choice for your air quality needs.

Do Air Purifiers Help with Formaldehyde?

Air purifiers with an abundance of Activated Carbon or PECO technology can help with formaldehyde and hundreds of other volatile organic compounds (VOCs) in the air.

Activated Carbon and PECO are the only air cleaning technologies that have high-efficiency ratings when it comes to removing formaldehyde. So if you want the best air purifier for formaldehyde, then look for either of those two features.

Does Dyson Air Purifier Remove VOCs?

Many people wonder if Dyson creates the best air purifier for VOC removal. The truth is that most Dyson air purifiers are not designed to remove high levels of VOCs.

Instead, Dyson air purifiers are good for removing airborne particles that cause allergies and respiratory issues.

Most Dyson air purifiers contain a True HEPA filter which can get rid of solid particulates such as dust, allergens, pet dander, mold spores, and bacteria. And while some units do contain an Activated Carbon filter, this filter is not as efficient as a dedicated air purifier for VOCs.

If you want to remove high concentrations of VOCs from your indoor air, then you should consider another brand of air purifiers like IQAir, Austin Air, and Airpura which have thick layers (and multiple pounds) of Activated Carbon in their filters.

How Do You Get Rid of VOCs?

The best way to get rid of VOCs is to add ventilation to your home. The top ways to remove VOCs include:

- Opening a window
- Using the exhaust fans in your kitchen and bathrooms
- Using an air purifier that's designed for VOCs
- Having a mechanical ventilator installed

Another option is to only choose low-VOC products for the construction and remodeling of your home. That way, you can eliminate as many VOCs from off-gassing into your home.

What Does Off-Gassing Mean?

Off-gassing refers to the release of airborne particulates and chemicals in the form of gas vapors. Off-gassing occurs from products that contain volatile organic compounds (VOCs),

such as construction materials, carpeting, cabinetry, furniture, paint, varnishes, adhesives, glue, etc.

Chemicals off-gas at different rates, but most manufactured goods undergo their most noxious off-gassing phases for about one to two months after they're produced. However, some chemicals can emit VOCs for years. For example, the materials in new carpeting have been known to off-gas for up to five years.

Enjoy Your New Air Purifier for VOCs and Formaldehyde

We hope you enjoyed this guide on how to choose the best air purifier for VOCs and formaldehyde.

As you learned, there are two main types of air filtration technologies that can meet the demands of airborne gases and chemicals: Activated Carbon and PECO technology.

By choosing any one of the best air purifiers for VOC removal reviewed here, you can rest assured that you're getting a good quality air purifier that keeps the air around you clean to breathe.

Now choose the one that's right for you!



About Patrick Holmes

Patrick is a Senior Air Quality & Comfort Specialist. He conducts in-depth research and analysis for our product reviews and buying guides in order to offer expert recommendations for people who are seeking to improve their indoor air quality and comfort. ([See Full Bio](#))