



Molekule Air Pro User Manual

A manual for home & healthcare use

PLEASE READ AND SAVE
THESE INSTRUCTIONS

For home use

Best practices

Place it in a big space.

Air Pro can be used in any room in the home. Make sure to place it away from walls for optimal airflow. For medical purposes in the home or for healthcare use, see the next page.

Run it 24/7.

Air Pro uses low energy to keep fresh air flowing.

Indications for use

The Molekule Air Pro air purifier is a device intended for medical purposes that is used to capture 95% of particulate matter and destroy bacteria, mold, and viruses by exposure to ultraviolet radiation when operated in Auto Protect Standard mode or manual mode at fan speed 2 or higher. Air Pro's sensor can also detect volatile organic compounds (VOCs), relative humidity (RH), and carbon dioxide (CO₂), so you can truly track the quality of your air.

The Molekule Air Pro air purifier has been demonstrated to destroy the following bioaerosols entrained on the filter of the subject device under the following exposure/working conditions:

Test item		Test results
		Average Maximum Log Reduction / Entrainment Time @ Fan Speed 6. Room Temperature Test
Bacteria	Escherichia coli	4.20 +/- 0.11 / 90 mins
Bacteria endospores	Bacillus subtilis	4.02 +/- 0.23 / 30 mins
Mold spores	Aspergillus brasiliensis	4.15 ± 0.06 / 60 mins
Virus	MS2 bacteriophage	4.38 ± 0.15 / 30 mins
		Single Pass Mechanical Filtration Efficiency
Particulate matter	0.3 to 1.0 micron-sized particles	95% or greater according to ASHRAE 52.2

Placement

Air Pro can be used in any room, including rooms within the home, for medical purposes. Recommended placement is within 3 ft of the user. When placed in a room featuring positive or negative pressurization, Air Pro should be placed 6 ft from any inlets or exits.

For medical use, run the device on Auto Protect Standard mode or manual mode at fan speed 2 or higher.

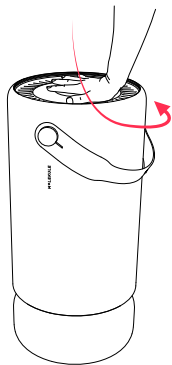
Warning!

Use of this equipment adjacent to or stacked with other equipment should be avoided as it can result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

Portable RF communications equipment (including peripherals such as antenna cables and external antennae) should be used no closer than 30 cm (12 inches) to any part of the Molekule Air Pro, including cables specified by the manufacturer. Otherwise, this could result in degradation of performance of this equipment.

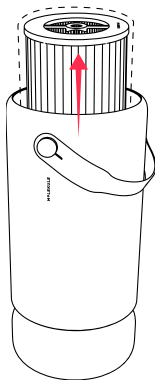
Setting up

Place away from walls for optimal airflow.



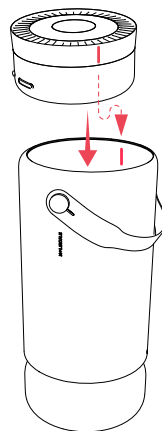
1

Push down on center core, turn counterclockwise and release. Core will rise on its own. Lift it off.



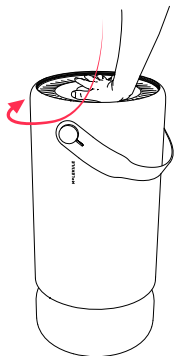
2

Remove PECO-Filter from plastic wrapper and place back in.



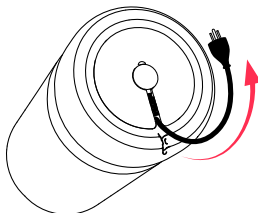
3

Align red line inside shell with red line on core so it falls into place.



4

Push down and turn clockwise until it locks into place.



5

Unwind cord and plug into power outlet.



6

Download the Molekule app to complete setup and enable control from your phone.

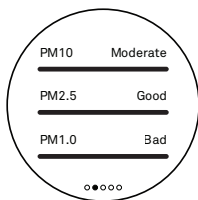
Controls & interface

Tap the touch screen once to awaken your purifier and get a glance at the Molekule Air Score and current status of your Air Pro. With advanced smart sensors, you can detect VOCs, RH, and CO₂ levels, providing deeper understanding of indoor air quality.

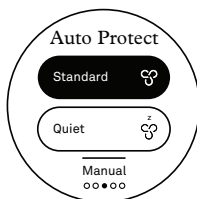


Home screen

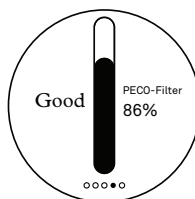
Swipe left and right to switch between the five screens:



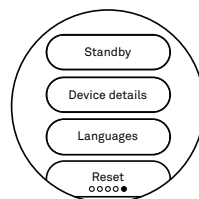
Air quality levels



Fan modes



PECO-Filter status



Settings

Modes & states

Home screen

See your overall air quality (AQ), from Good (green) to Very bad (purple) as well as your Air Score—a 2-digit number from 0-500 that aggregates your air's particle and chemical levels. Your fan-speed mode is displayed at the top. Access the fan-speed menu by swiping or tapping the top of the screen. Access the AQ level screen by tapping anywhere else on the screen.



A WiFi symbol indicates connectivity issues.



A filter icon tells you if your filter is missing, incorrectly installed, not authenticated, or is nearing or has reached recommended replacement time.

PECO-Filter status

The PECO-Filter status indicator helps you track the replacement schedule for your PECO-Filter.

Upon powering device or closing shell



Authentication

Each time you plug in your purifier or lock its shell into place, it checks the authenticity of the PECO-Filter. A pulsing white filter light indicates authentication has started.

A green filter light indicates it's confirmed as a certified Molekule PECO-Filter and will run normally.

A red filter light indicates the PECO-Filter has not been verified and the purifier will not start.

During use



Off

If the PECO-Filter status indicator is off, there's no need to replace your PECO-Filter.



Orange

An orange icon indicates your PECO-Filter is nearing recommended replacement time.



Red

A red icon indicates your PECO-Filter has reached recommended replacement time. Replace the existing PECO-Filter.



Red flashing + manual lights flashing

The purifier will go on standby while the flashing red icon indicates your PECO-Filter should be replaced immediately, as it has exceeded its recommended usage. To restart Air Pro, tap the center button on top of your purifier. Air Pro will repeatedly go on standby after extended use until the PECO-Filter is replaced.

WiFi status

The WiFi status indicator helps you track the replacement schedule for your PECO-Filter.

After setup



Initial connection

Upon powering the purifier (after setup), this indicator will pulse white while it searches for a connection.

If it turns green, it has connected successfully.

A red WiFi status indicator means an issue with your WiFi is prohibiting your Molekule Air Pro from connecting.

During use



Off

If the WiFi status indicator is off, there are no issues with your WiFi.



Red

A red WiFi status indicator means an issue with your WiFi is prohibiting your Molekule Air Pro from connecting.

Fan speed selector

Navigate between Auto Protect (Standard or Quiet) and manual modes (fan speeds 1-6).



Auto Protect – Standard

Auto Protect uses the PM sensor to measure airborne particulate matter levels and regulate fan speed for optimal air purification.



Auto Protect – Quiet

This setting also uses the PM sensor and regulates the fan, but will not run at high fan speeds, staying quiet while still maintaining effectiveness. Please note: in this mode, rooms with detected levels of particles will typically take longer to clean compared to standard Auto Protect mode.



Manual

Lets you cycle manually between the six fan speeds, from 1 (Low) to 6 (Boost).

Settings

- **Standby**

Powers down the fan and UV lights. Wake by tapping the screen.

- **Device details**

Access the device name, serial number, and firmware version.

- **Languages**

Change language settings.

- **Reset**

Erase all of the previously configured settings of your Air Pro, such as WiFi networks and last-used fan speed. If you had previously turned off the WiFi signal, it will turn back on.

- **Disable WiFi**

You can disable and re-enable WiFi here. This will prevent you from controlling your device with the mobile app.

What Air Pro senses in the air

Air Pro is designed to detect particles in the air using a laser-based sensor. Using a light-sensitive detector, the laser counts particles that reflect light and then gauges how many of them are in the air, giving you a window into the air within the room where your device is placed.

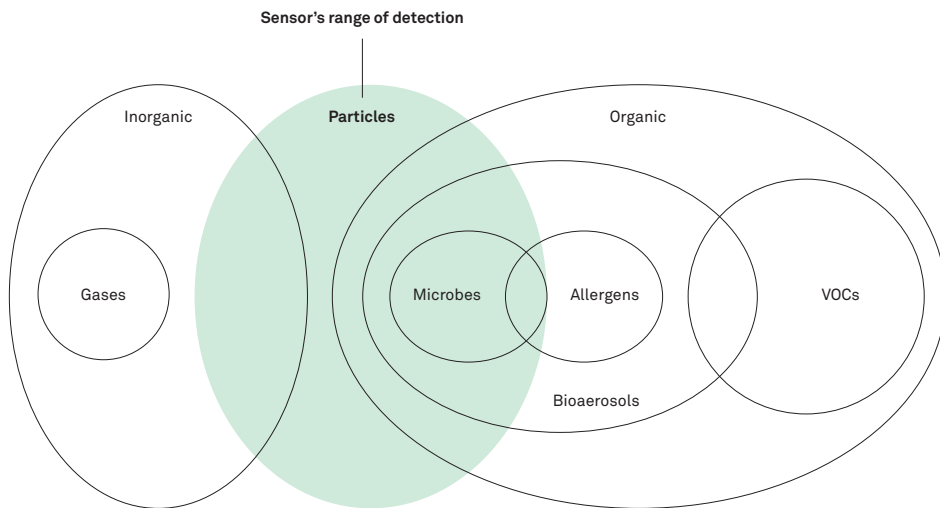
Airborne particles, or particulate matter (PM), can contain a range of allergens and microbes, including bacteria and viruses. Air Pro's sensor can detect three size ranges of particles, from about 1/5th down to 1/50th the width of a human hair (PM10, PM2.5, and PM1.0, down to 0.3 microns). But there's more to air pollution than just particles. While the particle sensor doesn't measure other types of pollution like ozone, VOCs (volatile organic compounds), and some allergens, you can rest assured that the unique PECO technology at the core of your device is working to destroy them.



Particle sensor

PM10, PM2.5, and PM1.0,
down to 0.3 microns

A window into your air



Auto Protect & particle levels

Understanding Auto Protect and particle levels

Auto Protect uses the laser-based particle sensor to take automatic readings of the air in front of it. It then adjusts the fan speed for optimal air purification in the room in which the device is running. It's important to note that air pollution is more than just particles. While your device may show a low level of particles in the air, the presence of other pollutants remain undetected by the particle sensor.

Particle levels

See the concentration levels of PM10, PM2.5, and PM1.0, down to 0.3 microns. As the sensor samples the air, it reports how many particles it detects on a four-tiered scale, from Good (green) to Very bad (purple).

Molekule's particle levels

The scale and color levels on your Air Pro measure particle concentration on a four-tiered scale. Your PM device sensor is designed only to reflect the presence of particles in a cross section of your air, not the overall air quality, which would be based on measurements of many different types of air pollutants. A “Good” reading on your device may mean a low volume of particles detected in the air, but air pollution is complex and based on hundreds of factors. The recommendations on the following pages are based solely on the levels of particles detected by the sensor.



Good



Moderate

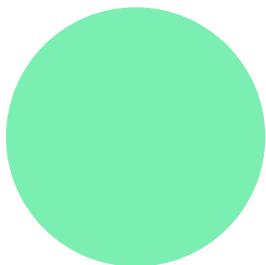


Bad



Very bad

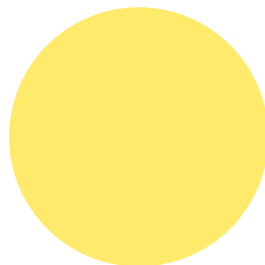
Particle levels



Good

Your Air Pro is detecting a low level of particles in the room.

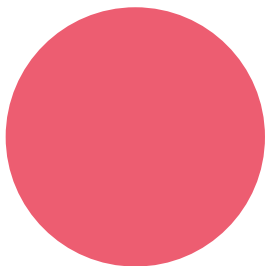
We suggest running your device on Auto Protect or at the lowest fan speed.



Moderate

Your Air Pro is detecting a moderate level of particles in the room.

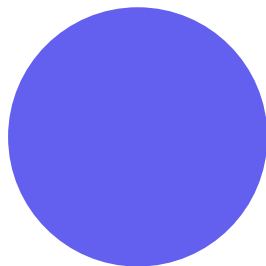
We suggest running your device on Auto Protect or increasing fan speed to continue cleaning the air.



Bad

Your Air Pro is detecting a high level of particles in the room.

We suggest running your device on Auto Protect or increasing fan speed to continue cleaning the air.



Very bad

Your Air Pro is detecting a very high level of particles in the room.

We suggest running your device on Auto Protect or increasing the fan to the highest speed to continue cleaning the air.

Particle sensor

Your Air Pro's sensor measures different particle sizes in a cross section of the air of the room it's operating in, giving you insight into your air. It can sense three sizes of particles, known as PM:

- **PM10:** Coarse particles 10 microns or smaller in width (about 1/5th of a human hair). Includes pollen, bits of mold, dander, and other matter common to indoor air.
- **PM2.5:** Fine particles 2.5 microns or smaller in width (about 1/20th of a human hair). Includes dust, bacteria, and other matter common to indoor air.
- **PM1.0:** Microfine particles 1 micron or smaller in width (about 1/50th of a human hair). Includes smoke particles, some bacteria, and other matter common to indoor air.

While Air Pro can read the size of particles in a cross section of the air, it cannot read what they are. The examples in parentheses above are size references for different types of particles. The sensor in Air Pro can measure particles down to 0.3 microns.



PM10

Good

PM2.5

Good

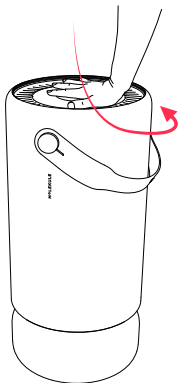
PM1.0

Good



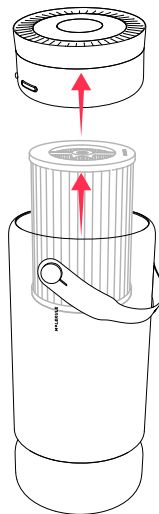
How do I replace the filter?

User servicing instructions



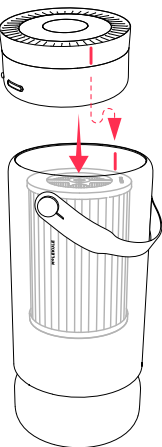
1

Push down on center core, turn counterclockwise and release. Core will rise on its own. Lift it off.



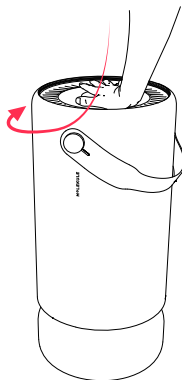
2

Remove used PECO-Filter and discard. Unwrap new PECO-Filter and place in device.



3

Align red line inside shell with red line on core so it falls into place.



4

Push down and turn clockwise until it locks into place.

Disposing of filters

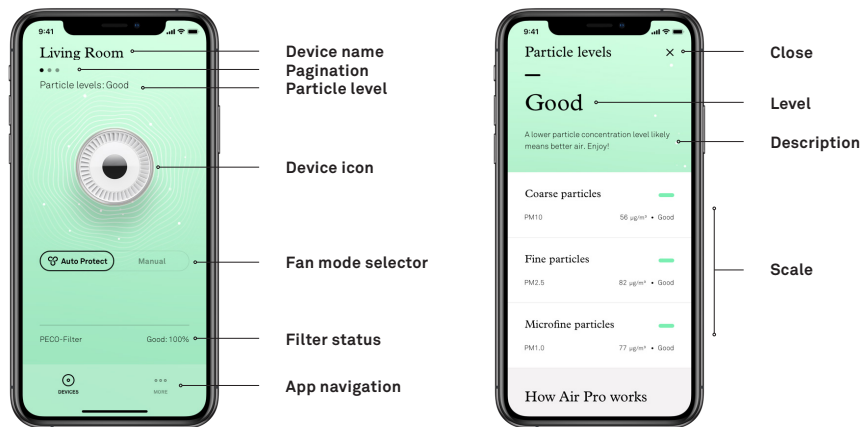
Additional cleaning and disposal actions are required for closed quarantine areas and healthcare facilities in mitigating the risk of airborne virus transmission.

Discard the used filter per the biohazard removal process recommended by your healthcare provider. Contact your healthcare provider for biohazard bags and containment recommendations specific for your environment.



App

The Molekule applications enable you to control the purifier, and have access to filter status, particle levels, and a host of additional features.



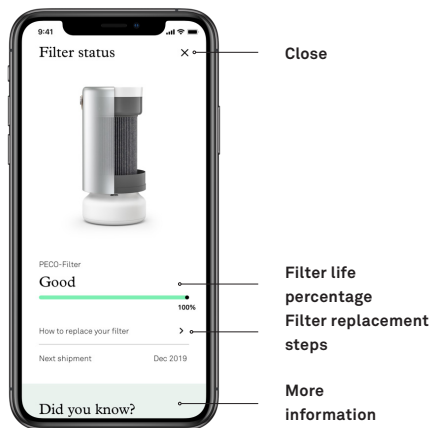
Device control screen

This is where you can control the fan speeds, access the PECO-Filter status, and the particle level details.

Particle levels

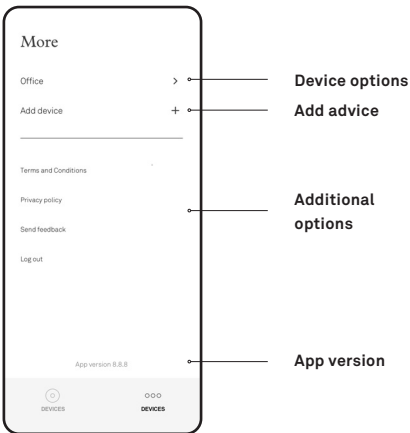
This screen shows the current particle level, provides more information on how the Molekule Air Pro detects particles in the air, and opens access to blog content.

More additional help with application uses, and setting it up the device



Filter screen

The Filter status screen gives you more details on how to replace the PECO-Filter, and more information on the filter itself, and auto-refill services.



More

The More menu provides access to device-specific actions like rename, WiFi setting, standby, and more.

How do I clean the device?

- Wipe external surfaces only—per your standard surface-cleaning procedure until surfaces are free of soil. Repeat as necessary.
- Do not spray into the intake or outlet with cleaner.
- Wipe them down instead. Do not clean the interior.
- Do not clean or contact LED lights.

Warning!

Failing to follow these cleaning instructions can increase the risk for electric shock and/or damage to the device. To reduce the risk of electric shock, always unplug the device before performing any cleaning.

Help & support

We're here to help. If you have issues with your device, filter, app or account:

Visit us

help.molekule.com

Call us seven days a week, 8am-5pm PT

+1 (855) 999-9069

Molekule Inc.

1301 Folsom Street,
San Francisco, CA 94103

Frequently asked questions

How do PECO-Filter auto-refills work?

Air Pro ships with one PECO-Filter. We offer a PECO-Filter auto-refill plan to help ensure you have clean air when you need it by shipping PECO-Filters automatically to your doorstep.

Why does my device come with a bag of activated carbon on top and why does it have an odor?

Like any new product, your device encounters odors and VOCs during manufacturing and shipping. To reduce their initial presence in the air before you've plugged in your device and activated the PECO destruction process, each Molekule Air Pro ships with a small bag of activated carbon, which you can dispose of. While the bag acts mostly as a deodorizer during the shipping process, your device may still have a noticeable odor by the time it arrives. This initial odor should dissipate within 24-48 hours of continuous device usage.

Why is my device's filter status red and device shutting down?

We understand that our customers lead busy lives and may forget to change the filter, which prevents them from having the cleanest air possible. Once a Molekule Air Pro's PECO-Filter status indicator is red, this means the filter is beyond recommended usage and you should immediately replace your PECO-Filter. If you don't yet have your replacement filter, order it now. In the meantime, you can temporarily restart the device by tapping the display. It will restart for a little bit, and then repeatedly go into standby until you replace it.

Why is my device unresponsive, and I'm seeing an error message?

Something has triggered a fatal error. Unfortunately, your device is no longer operational. Please contact Molekule Customer Support from 8am-5pm PT, seven days a week at +1 (855) 999-9069 to see if your device is under warranty and how to get a replacement unit.

Why won't my device power on?

If you touch the device display and it doesn't turn on, follow these recommended steps:

- Make sure the device is plugged into a working outlet.
- Make sure the power cord is fully plugged into the bottom of the device.
- Make sure the PECO-Filter inside the device is unwrapped.
- Make sure your PECO-Filter has been verified by inserting it into the device, twisting the device core closed, and waiting for the PECO-Filter status light to turn green.

Does Molekule Air Pro emit WiFi signals?

Air Pro has built-in hardware that does emit WiFi signals. You can turn WiFi radio off in the Settings menu.

Safety precautions & warnings

Never place any objects on top of the unit. Do not place the unit directly below a shelf or other objects that might hinder the exiting air flow. Never cover vents while the unit is running. Avoid dropping the device or placing the device on an uneven or potentially unstable surface. To help ensure stable placement of the device and limit risk of tipping, only place on stable, flat floor surfaces and make sure the cord is fully clipped into the cord holder. Do not insert or drop any foreign objects or liquids into the device. If either happens, immediately unplug the device and contact Molekule Customer Support. If the device is demonstrating unwanted or unexpected behavior, unplug the device and contact Molekule Customer Support.

Do not alter, clean, or tinker with the PECO-Filter. Changes or damage to the PECO-Filter may interfere with proper operation. Ensure your fingers are clear of the space between the top core and the metal housing when placing the core back onto the unit after filter replacement.

The LEDs in your Molekule Air Pro are meant to last the lifetime of the product. Do not attempt to repair or replace these LEDs without explicit instruction and approval from Molekule. Do not clean the device with any liquid cleaning agents or water. These items pose a fire, electric shock or injury risk. The device should only be cleaned using a dry cloth. Do not operate any device with a damaged power cord or plug.

Do not run the power cord under carpeting or cover the cord with throw rugs, runners or similar coverings. Do not route the cord under furniture or appliances. Keep the cord away from high-traffic areas to avoid a tripping hazard.

WARNING: To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.

Always carry your Molekule Air Pro by the handle. Do not carry by housing or base.

This device complies with IEC 60601-1-2 ed. 4.0 (2014-02) medical electrical equipment – Part 1-2: General Requirements for basic safety and essential performance – Collateral Standard: Electromagnetic disturbances – Requirements and tests. Based on the test results this device complies with Radiated Emissions, AC Mains Conducted Emissions, Harmonics, Flicker, Electro-Static Discharge Immunity, Radiated, Radio-Frequency, Electromagnetic Immunity, Immunity to Proximity Fields from FR Wireless Communications Equipment, Electrical Fast Transient/Burst Immunity Test, Immunity to Surges, Conducted, Radio-Frequency, Electromagnetic Immunity Test, Power Frequency Magnetic Field Immunity Test, Voltage Dips/Interruptions Immunity Test Requirements.

Disclaimer

Your Molekule Air Pro's sensor is intended to be comparable to other commercially available consumer air sensors. At sufficient concentrations, it is sensitive to all physical particles, like dust, smoke, components of vehicle exhaust, soot, and many other airborne substances. Internal testing has shown Molekule Air Pro's sensor is accurate to a factor of two or better compared to certain sensors used in laboratories to study atmospheric composition.

The levels of particles it reports may not precisely conform to other methods of measuring particulate matter pollution. Rather, they are intended to be a close estimation of the particulate level in the room in which it's currently operating. Excessive moisture is the primary cause of inaccurate readings, as the sensor can mistake harmless airborne water vapor for particulate matter. For more information about the difference between the equipment used in scientific laboratories to study the composition of the atmosphere and consumer air quality sensors, visit this blog page (molekule.science/consumer-grade-air-quality-sensors-are-they-good-enough/).

People who are: immunocompromised; have compromised heart or lung function; have a history of asthma, heart disease, or any other heart and lung conditions; children; and the elderly should always follow any action plans for asthma attacks, heart problems, or any other health issue regardless of the particulate levels reported by the Molekule sensor.

The sensor in your Molekule device only detects particulate matter. All other types of pollution are not included in the levels reported. The sensor and air purifier are not medical devices and the information they provide is not intended to diagnose, treat, cure, or prevent any disease or condition. Consult your doctor if you are unsure what levels of particulate matter are safe for you, and visit www.airnow.gov for more information on particulate matter and all aspects of air pollution.

As with any product, your device uses new plastics and materials in its manufacture. We do all we can to minimize off-gassing from these materials, including shipping each device with carbon filters to absorb smells. Despite this, there may be a noticeable smell during the first 24-48 hours of use, which is safe and expected. If these odors are produced by VOCs, the particulate matter sensor in your Molekule Air Pro will be unable to detect their presence or automatically adjust the fan speed to remove them. Nevertheless, this particular type of off-gassing is harmless and temporary. After the initial settling period, scents should significantly subside. At that point, your filter has reached full effectiveness.

Limited warranty information

Molekule warrants that for a period of two years from shipment, your Molekule Air Pro unit (the “Product”) will be free from defects in materials and workmanship under normal use in accordance with the documentation provided with the Product. In the event of a defect, visit Molekule at molekule.com/contact for return instructions.

Molekule’s policy is to honor product warranties only on products purchased directly from Molekule or from authorized Molekule resellers, and only if accompanied by a receipt or proof of purchase. A list of Molekule’s authorized resellers is available on Molekule’s website. If you purchase a Molekule product from an unauthorized dealer or if the original factory serial number has been removed, defaced or altered, your Molekule product warranty will be deemed invalid. Shipping charges may apply except where prohibited by applicable law.

Molekule's sole obligation under this warranty will be at its option to repair or replace the Product and the replaced Product will be warranted for the remaining period of the original warranty. Replacement Products may contain new or refurbished parts. This warranty does not apply to Products damaged by misuse, accident, electrical disturbance or normal wear and tear. The Product is not designed for or warranted against damage from use in areas subject to extreme temperature, excessive moisture, or other inherently hazardous environments, or use of unauthorized filters or other components. ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THIS WARRANTY. EXCEPT FOR THE LIMITED EXPRESS WARRANTIES SET FORTH ABOVE, MOLEKULE DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary by jurisdiction.

FCC statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device and its antenna(e) must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Responsible party: Molekule Inc. 1301 Folsom Street, San Francisco, CA 94103
Phone number: +1 (855) 999-9069

IC statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage.
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For products available in the USA/Canada market, only channels 1 to 11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

IC Radiation Exposure Statement

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

The transmitter module may not be co-located with any other transmitter or antenna.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.

