

Clean Air, Clean Home

Understand your air and your Laser Egg readings



Use this IAQ cheat sheet to help you:

- Identify key air pollutants and pollution sources
- Understand readings on your Laser Egg and what they mean for you
- Control your home's indoor air quality

Common Sources of Air Pollution

Outdoor



Vehicle exhaust



Industry



Natural sources

Indoor



Paints



Aerosol sprays



Pet dander



Cleansers and disinfectants



Dust



Mold



Smoke



Cooking

Particulate Matter (PM_{2.5})

Particulate matter (PM) is an umbrella term for all airborne particles, including dust, mold spores, and smoke.

PM_{2.5} levels:

AQI Category (US Standard)	AQI (US Standard)	PM _{2.5} (in ug/m³)
Good	0-50	0-12
Moderate	51-100	12.1-35.4
Unhealthy for sensitive groups	101-150	35.5-55.4
Unhealthy	151-200	55.5-150.4
Very unhealthy	201-300	150.5-250.4
Hazardous	301-999	250.5-99999.9

PM_{2.5} information from the EPA.

When PM_{2.5} is high:



Turn on your air purifier



Keeps doors and windows closed



Total volatile organic compounds (TVOC) represents the total amount of harmful chemicals in your air, like formaldehyde and benzene.

TVOC levels:

Rating	Recommendation	TVOC (ppb)
Good	Target value	0-220
Moderate	Ventilation recommended	220-660
Poor	Intensified ventilation recommended	660-2200
Poor	Intensified ventilation necessary	2200-3300
Very Poor	Intense ventilation necessary	3300-4400
Very Poor	Intense ventilation necessary	4400-5500 & 5500+

TVOC information from the German Federal Environmental Agency.

When TVOC is high:



Open windows or increase ventilation rate



Turn off your purifier

Carbon Dioxide (CO₂)

Carbon dioxide is a colorless, odorless gas that can make you drowsy, lethargic, and even give you a headache.

Carbon dioxide levels:

Rating	Recommendation	CO₂ Concentration (ppm)
Good	Limited or no health effects	400-1000
Moderate	Ventilation recommended	1000-1500
Poor	Ventilation highly recommended	1500-2000
Poor	Ventilation required	2000-2500
Very Poor	Intense ventilation required	2500-5000
Very Poor	Intense ventilation required	5000-10000 & 10000+

CO₂ information from OSHA and ASHRAE.

When carbon dioxide is high:



Open windows or increase ventilation rate



Turn off your purifier



Move to a larger space or outdoors

Clean Air Habits

A little goes a long way. Here are some reminders to keep your home clean and healthy all year-round.

Daily

- Ventilate when cooking or cleaning
- Turn on your humidifier as needed

Weekly

- Dust, vacuum, and mop common spaces
- Wipe down your air purifier's pre-filter

Periodically

- Test/replace HEPA purifier filter(s)
- Clean your humidifier with soap and water
- Check moist spaces for mold growth

For more resources on air quality, please visit:

https://learn.kaiterra.com/en/air-academy

If you need help with your Laser Egg, please contact us at support@kaiterra.com