



## Your Air Quality Report

### Getting Started

Our AirLab report provides you with a comprehensive assessment of your indoor air quality. Your report includes information on many different types of chemicals and toxins, and it might seem a little overwhelming at first glance. Don't worry, we'll guide you through the information one step at a time. The report provides your results in three main categories:

- Volatile Organic Compound (VOC) results
- Radon levels
- Mold and Allergen estimation

And for each category you'll find lots of valuable information. Here's how we've organized things:

- Chemical or Hazard Name
- Level of hazard present in your home
- VOC Risk Rating, Radon Action Rating, and Allergen Abundance Rating
- Comparison of your VOC and Radon results to typical indoor air levels
- Additional links to the AirLab library, including sources of hazards and chemicals, health effects, and suggestions on ways to reduce hazard levels

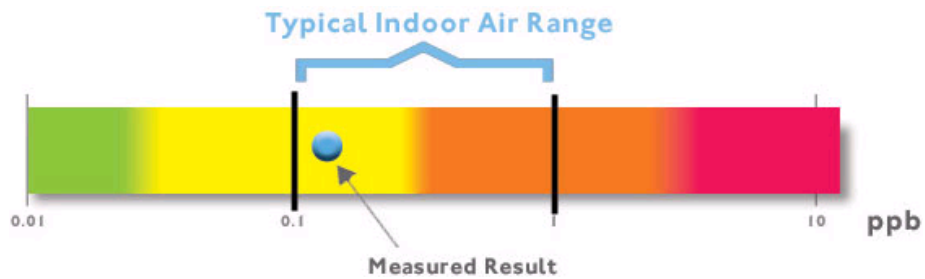
### How to read your VOC results

The concentration or level of chemical measured in your home is measured in units of part-per-billion (ppb). A reported concentration of 1 ppb of benzene means that there is 1 molecule of benzene measured in 1 billion air molecules. To help you visualize what this represents in more familiar terms, 1 ppb equals:

- One 4-inch hamburger in a chain of hamburgers circling the earth at the equator 2.5 times†
- One sheet in a roll of toilet paper stretching from New York to London†
- One second of time in 32 years†

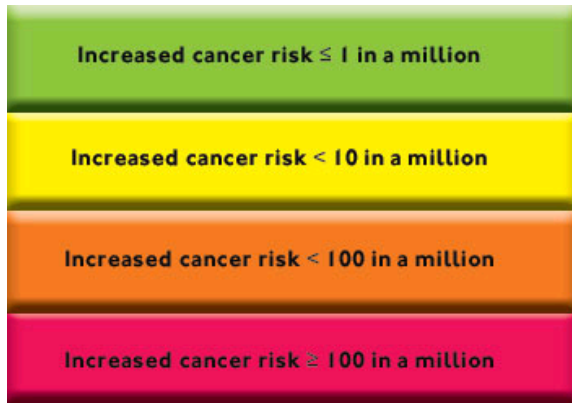
Next to the measured concentration is the Risk Rating Scale. The Risk Rating is determined by comparing the concentration in your home to risk-based screening levels developed by the Oak Ridge National Laboratory (ORNL) in conjunction with the U.S. EPA.‡ [Click here](#) to read more about Risk and Screening Levels. The Risk Rating Scale is intended to serve as a general guide to assist with data interpretation. Each person's health risk is dependent on several factors including the level and duration of chemical exposure, age, sex, lifestyle, family traits and overall health. AirLab has used the most research available to develop the Risk Rating Scales for each chemical.

An example of a chemical Risk Rating is below, as well as a detailed explanation of the Risk Rating Scale:



If a chemical in your home is listed as Not Detected, you will see an open marker placed on the rating scale at the lowest level that the laboratory can measure.

Risk rating scale for known or suspected carcinogens

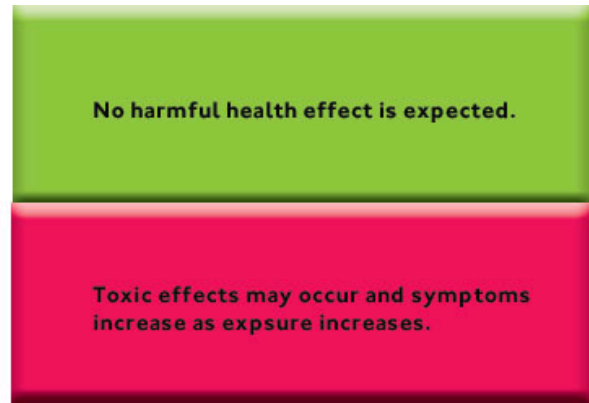


Lowest Risk





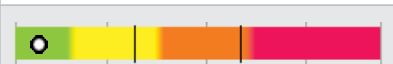


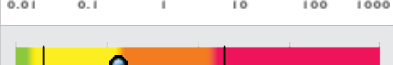






Higher Risk

Risk rating scale for non-carcinogens



The typical indoor air range is provided for each chemical allowing you to compare your home's indoor air quality to other homes. The typical indoor air levels are primarily based on a recent publication which provides a compilation of indoor air concentrations from numerous studies in North American homes. Many of these studies were funded by the EPA or other regulatory agencies. For most chemicals, the range displayed represents the concentrations between the 25% and 95% percentile of homes tested. In other words, approximately 25% of the homes tested had concentrations below the range and 5% of the homes had concentrations above the range. The references used to generate the typical indoor air ranges are listed at the end of the AirLab report.

Volatile Organic Compound Results  Typical indoor air levels				
Chemical	Concentration (ppb)	Risk Rating	What are the health effects of this chemical?	Where does this chemical come from?
Acetaldehyde	11		Possible Carcinogen	<a href="#">Learn more</a>
Benzene	0.71		Known Carcinogen	<a href="#">Learn more</a>
Carbon Tetrachloride	0.15		Possible Carcinogen	<a href="#">Learn more</a>
Chloroform	1.5		Possible Carcinogen	<a href="#">Learn more</a>
1,4-Dichlorobenzene	Not Detected		Possible Carcinogen	<a href="#">Learn more</a>
Ethylbenzene	0.31		Possible Carcinogen	<a href="#">Learn more</a>
Formaldehyde	41		Known Carcinogen	<a href="#">Learn more</a>
Methylene Chloride	Not Detected		Possible Carcinogen	<a href="#">Learn more</a>
Naphthalene	0.13		Possible Carcinogen	<a href="#">Learn more</a>
Styrene	0.13		Possible Carcinogen	<a href="#">Learn more</a>
Tetrachloroethylene	0.022		Probable Carcinogen	<a href="#">Learn more</a>
Toluene	3.5		Neurological Effects	<a href="#">Learn more</a>
1,1,1-Trichloroethane	Not Detected		Liver Effects	<a href="#">Learn more</a>
Trichloroethylene	Not Detected		Probable Carcinogen	<a href="#">Learn more</a>
1,2,4-Trimethylbenzene	0.21		Neurological Effects	<a href="#">Learn more</a>
Xylenes	1.1		Neurological Effects	<a href="#">Learn more</a>

How to read your Radon results

Radon is measured in units of picocurie per Liter (pCi/L). A pCi/L is a unit of radiation in a volume of air. Next to your Radon measurement is the Action Rating Scale. The EPA requires action if your levels are 4 pCi/L or greater. Results between 2 pCi/L and 4 pCi/L can often be reduced by fixing your home while reducing your levels below 2 pCi/L is difficult.

Radon Results					
Hazard	Concentration (pCi/L)	Action Rating		What are the health effects of this chemical?	Where does this chemical come from?
Radon	5			Carcinogen	<a href="#">Learn more</a>

*If your results are listed as 'Not Available', either the sampler was damaged or not returned to the laboratory with the Test Kit, or your results were invalid due to delay in delivery to the lab, or your state regulations prevent delivery of reports through AirLab website. AirLab is currently unable to provide radon results to residents in either Iowa or New Jersey.*

[Click here](#) to view the formal lab report.

*Radon results are provided by a contracted NEHA and NRSB certified radon laboratory.*

The allergen report lists the type and measurement in units of counts per square centimeter of fungi (commonly referred to as mold) and other particulates such as pollen, dander, and fibers measured on the surface tested in your home. As there are no accepted guidelines or risk-based screening levels for molds and allergens, estimated amounts are categorized by their abundance measured on the tape sample. Estimated amounts are categorized as 'Rare', 'Light', 'Moderate' or 'Heavy'. The abundance rating scale for fungi and particulates is listed below. Adverse effects are largely dependent on the individual's sensitivity to the biological contaminant. There are hundreds of molds that can be identified and measured from the AirLab tape sample. To keep the report simple, we just listed the molds that were detected. A typical home will have between two and five types of molds detected on the tape sample.

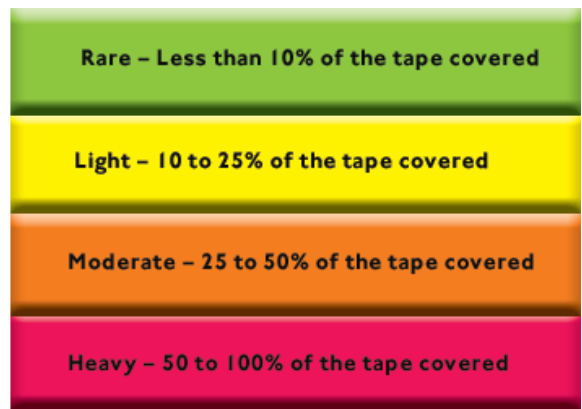


If a Particulate is listed as "Not Detected", you will see an open marker to the left of the 'Rare' Rating.

Abundance Rating Scale-Mold



Abundance Rating Scale-Particulates



## Allergen Results

### Mold

Mold	Measurement (count per sq cm)	Abundance Rating	Indication of fungal growth	Where does this hazard come from?
<a href="#">Alternaria species</a>	7		Not Likely	<a href="#">Learn more</a>
<a href="#">Bipolaris/Drechslera</a>	3		Not Likely	<a href="#">Learn more</a>
<a href="#">Smuts/Myxomycetes</a>	1		Not Likely	<a href="#">Learn more</a>

### Particulates

Particulates	Measurement (count per sq cm)	Abundance Rating	Where does this hazard come from?
<a href="#">Dander</a>	12		<a href="#">Learn more</a>
<a href="#">Fibers</a>	14		<a href="#">Learn more</a>
<a href="#">Other Particulate</a>	2		<a href="#">Learn more</a>

Allergen results are provided by a contracted AIHA-accredited laboratory.

The AirLab Test Kit and corresponding AirLab reports provided by AirLab Home Kit, a California corporation (AirLab), are intended to serve as screening level tests only, and the analytical results, toxicity information and comparisons reports are not intended to be comprehensive, definitive or conclusive findings of the existence, absence, level or types of chemicals, contaminants, toxins and/or other compounds for which the AirLab Test Kit is intended test (See Covered Chemicals and Toxins) or to be relied upon to take or abstain from taking any remedial or other action. AirLab does not warrant the accuracy and completeness of any such test or report and comparisons of data to toxicity profiles in the related AirLab reports do not constitute and shall not be considered to be a warranty, either express or implied, as to the safety of the subject test area. AirLab recommends further testing be done before any action is taken. [Click here](#) to read entire Terms and Conditions.

#### NOTES

Suspected or Known Carcinogens	Non Carcinogens
Acetaldehyde <sup>2</sup>	Toluene <sup>1</sup>
Benzene <sup>1</sup>	1,1,1-Trichloroethane <sup>1</sup>
Carbon Tetrachloride <sup>1</sup>	1,2,4-Trimethylbenzene <sup>3</sup>
Chloroform <sup>1</sup>	Xylenes <sup>1</sup>
1,4-Dichlorobenzene <sup>3</sup>	
Ethylbenzene <sup>1</sup>	
Formaldehyde <sup>5</sup>	
Methylene Chloride <sup>1</sup>	
Naphthalene <sup>5</sup>	
Styrene <sup>3,4</sup>	
Tetrachloroethylene <sup>1</sup>	
Trichloroethylene <sup>1</sup>	

1. A Compilation of Statistics for VOCs from Post-1990 Indoor Air Concentration Studies in North American Residences Unaffected by Subsurface Vapor Intrusion. H.E. Dawson and T. McAlary, *Groundwater Monitoring & Remediation*, Winter 2009, 29 (1) 60-69. (Indoor air range is represented by the 25 to 95% quartile.)
2. National survey, Indoor air quality in French Dwellings Final report, November 2006. (Indoor air range is represented by the 25 to 95% quartile.)
3. Indoor Air Concentrations in Suburban and Rural New Jersey. C.P. Weisel et al., *Environ. Sci. Technol.*, 2008, 42 (22), 8231-8238 (Indoor air range is represented by the 25 to 95% quartile.)
4. Comparison of Personal, Indoor, and Outdoor Exposures to Hazardous Air Pollutants in Three Urban Communities Minnesota. K. Sexton et al., *Environ. Sci. Technol.*, 2004, 38, 423-430 (Indoor air range is represented by the 10 to 90% quartile.)
5. Distribution of volatile organic chemicals in outdoor and indoor air. J.J. Shah and H.B. Singh, *Environ. Sci. Technol.*, 1988, 22 (12), 1381-1388 (Indoor air range is represented by the 25 to 75% quartile.)
6. Available data on naphthalene exposures: Strengths and Limitations. P.S. Price and M.A. Jayjock, *Regulatory Toxicology and Pharmacology*, 2008, 51, S15-S21 (Quartiles are not provided, general indoor range is cited.)

#### References

†Kamrin, M. A., Katz, D.J., and Walter, M.L., Taking the Risk out of Reporting Risk Assessment, National Sea Grant Program, 1996.  
‡[http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\\_table/index.htm](http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm)