

PREPARED FOR: TRI COUNTY INSPECTION& ENVIRONMENTAL TESTING, LLC

TEST ADDRESS: 



CERTIFICATE OF MOLD ANALYSIS

PREPARED FOR

TRI COUNTY INSPECTION& ENVIRONMENTAL TESTING, LLC

PHONE NUMBER: (262) 716-8997

EMAIL: AARON@WISCONSININSPECTION.COM

TEST LOCATION:



CHAIN OF CUSTODY # 52908248

COLLECTED: TUE DECEMBER 10, 2024

RECEIVED: THU DECEMBER 12, 2024

REPORTED: THU DECEMBER 12, 2024

APPROVED BY:



John D. Shane PhD
Laboratory Manager

VERSION: 1.0 (A VERSION NUMBER GREATER THAN ONE (1) INDICATES THAT THE DATA IN THIS REPORT HAS BEEN AMENDED)

EPA regulations or standards for airborne or surface mold concentrations have not been established. There are also no EPA regulations or standards for evaluating health effects due to mold exposure. Information about mold can be found at www.epa.gov/mold.

All samples were received in an acceptable condition for analysis unless noted specifically in the Comments section under a particular sample. All results relate only to the samples submitted for analysis and apply to the samples as received by the laboratory. Volumes, flowrates, areas or other information are supplied by the customer. This information can affect the validity of the results. Results have not been adjusted for field or laboratory unless otherwise noted. PriorityLab bears no responsibility for sample collection activities or analytical method limitations. No warranty is either express or implied and PriorityLab assumes no responsibility or liability for errors in public information utilized, statements from sources other than PriorityLab, or developments resulting from situations outside the scope of this analysis, nor for the purpose for which the client uses the analysis. The determinations in this report are outside the scope of the AIHA LAP, LLC scope of accreditation. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. PriorityLab liability is limited to the cost of the sample analysis and may not exceed the amount of the fee paid by the client.

Reports are issued free of alterations or additions and PriorityLab does not accept liability of the tampering or unlawful alteration of documents sent. All reports are expressly and exclusively for PriorityLab clients and may not be reproduced by third parties. If this report is reproduced, it must be reproduced in full unless written permission is obtained from PriorityLab. PriorityLab keeps all client data secure and confidential and any information contained in reports or files will not be divulged unless permission is expressly given by the client submitting the samples(s) except where authorized by law and all PriorityLab

Detailed Mold Analysis (WATER-INDICATING FUNGI, IF PRESENT, ARE SHOWN BELOW IN RED)

Analysis Method	Air Analysis	Air Analysis	Air Analysis	Surface Analysis
Lab Sample #	52908248-1	52908248-2	52908248-3	52908248-4
Sample Identification	16647577	16647441	16579339	SWAB 1
Sample Location	OUTSIDE/ CONTROL	DINING ROOM	BASEMENT	ATTIC
Sample Type / Metric	Breeze ST/150L	Breeze ST/150L	Breeze ST/150L	Swab
Analysis Date	Thu December 12, 2024	Thu December 12, 2024	Thu December 12, 2024	Thu December 12, 2024
Determination	CONTROL	PROBLEM	PROBLEM	GROWTH

Fungal Types Identified	Raw Count	Spores / m ³	% of Total	Raw Count	Spores / m ³	% of Total	Raw Count	Spores / m ³	% of Total	Mold Present	
*INDOOR PROBLEM FUNGI											
Chlamydo spores	---	---	---	---	---	---	---	---	---	Present	
Cladosporium	---	---	---	---	---	---	---	---	---	Present	
Hyphae	---	---	---	---	---	---	---	---	---	Present	
Penicillium/Aspergillus	---	---	---	164	1,099	95	2,268	15,196	99	---	
Unclassified Colorless Spores	---	---	---	---	---	---	---	---	---	Present	
**Non-Problem Fungi											
Ascospores	9	60	47	---	---	---	---	---	---	---	
Basidiospores	2	13	10	1	7	<1	1	7	<1	---	
Cladosporium	4	27	21	5	34	2	14	94	<1	*	
Epicoccum	---	---	---	1	7	<1	---	---	---	---	
Penicillium/Aspergillus	4	27	21	*	*	*	*	*	*	---	
Total Spore Count[#]	19	130	100	170	1,100	100	2,300	15,000	100	NA	
Minimum Detection Limit	7			7			7			1	
Comments/Definitions Raw Count: Actual number of spores observed and counted. Spores/m³: Spores per cubic meter. % of Total: Percentage of a particular spore in relation to total number of spores. Present = growth observed. ---: Spore type was not observed. * : Indicates to look above at the names in red under "indoor problem fungi".	CONTROL samples are normally taken outside a building to provide a baseline from which samples on the interior of the building are compared. Outside air is considered normal whatever the mold counts may be. LIGHT DEBRIS: The debris present in the sample likely had no effect on the accuracy of the mold count.			Mold concentrations in the air are ABNORMAL and based on the mold counts, you likely have a mold source from which spores are able to become airborne and are an exposure concern to the occupants. MODERATE DEBRIS in the sample likely had a limited effect on the accuracy of the mold count.			Mold concentrations in the air are ABNORMAL and based on the mold counts, you likely have a mold source from which spores are able to become airborne and are an exposure concern to the occupants. MODERATE DEBRIS in the sample likely had a limited effect on the accuracy of the mold count.			Presence of current or former MOLD GROWTH observed. EXPOSURE TO SPORES LIKELY and will continue if the growth is not removed. An active or intermittent water source will cause the mold to continue to grow if the water source is not eliminated. Your ESTIMATED spore count is as follows: 315,488 CHLAMYDOSPORES / square inch. 82,506 CLADOSPORIUM spores / square inch. 412,533 UNCLASSIFIED COLORLESS spores / square inch.	

* **Indoor Problem Fungi** are generally capable of growing on wetted building materials.

** **Non-Problem Fungi** are less capable or do not grow on wetted building materials. They are commonly found in the air outside and infiltrate into indoor air naturally.

High numbers of any one of these spore types as compared to the Control sample may indicate that they are growing on wetted building materials indoors.

Spore types not listed in this report were not observed.

Background debris estimates the amount of non-spore particles. Increasing amount of debris will affect the accuracy of the spore counts. Total percent may not equal 100% due to rounding.

#Total Spore Counts are reported to 2 significant figures.

Introduction

All spores found in indoor air are also normally found in outdoor air because most originate or live in the soil and on dead or decaying plants. Therefore, it is not unusual to find mold spores in indoor air. This Mold Glossary is only intended to provide general information about the mold found in the samples that were provided to the laboratory.

Ascospores

Outdoor Habitat: Soil and decaying vegetation, dead and dying insects. These spores constitute a large part of the spores in the air and can be found in the air in very large numbers in the spring and summer, especially during and up to three (3) days after a rain.

Indoor Habitat: Very few of fungi that produce ascospores grow indoors. Some fungi that produce ascospores are recognizable by their spores and when observed are listed under their own categories. Wetted wood and gypsum wallboard paper

Allergy Potential: Depends on the type of fungus producing the ascospores.

Disease Potential: Not normally pathogenic as a group

Toxin Potential: None known

Comments: Ascospores are produced from a very large group of fungi. Notable ascospores that are considered problematic for indoor environments are Chaetomium, Peziza, and Ascotracha. If these types of ascspores are observed they will be listed in the report under their own names.

Basidiospores

Outdoor Habitat: These are mushroom spores and are common everywhere outside, especially in the late summer and fall.

Indoor Habitat: Sometimes mushrooms can be observed growing in potted plants indoors.

Allergy Potential: Rarely reported, but some Type I (hay fever, asthma) and Type III (hypersensitivity pneumonitis) has been reported.

Disease Potential: None known

Toxin Potential: None known

Comments: Mushroom spores are commonly found indoors, especially when the outdoor spore count is high. When spores of this group are derived from wood rotting fungi, including dry rot (Serpula and Poria), they can be especially destructive to buildings. When spores from destructive types of mushrooms (dry and wet rot group) are observed in the sample they are listed under their own names on the report.

Chlamydo spores**Outdoor Habitat:** Soil and decaying vegetation**Indoor Habitat:** Wetted wood and gypsum wallboard paper, paper products.**Allergy Potential:** None known**Disease Potential:** None known**Toxin Potential:** None known**Comments:** Asexual resting spores of all fungi***Cladosporium*****Outdoor Habitat:** Cladosporium is one of the most common environmental fungi observed worldwide and is widely reported from soil and decaying vegetation.

Cladosporium herbarum and C. cladosporioides are among the most frequently encountered species, both in outdoor and indoor environments.

Indoor Habitat: Wetted wood and gypsum wallboard paper, paper products, textiles, rubber, window sills. Cladosporium has the ability to grow at low temperatures and can thus, grow on rubber gaskets and food in refrigerators.**Allergy Potential:** Type I (hay fever, asthma) - an important and common outdoor allergen**Disease Potential:** Opportunistic pathogen in immunocompromised persons, not normally a pathogen in healthy individuals. Cladosporium are some of the most common species reported as indoor contaminants, occasionally linked to health problems.**Toxin Potential:** Cladosporium has two known toxins (cladosporin and emodin). These toxins are not known to be highly toxic. There is no evidence in the literature of toxic effects associated to inhalation of Cladosporium conidia (spores) indoors.**Comments:** The most commonly reported spore in the outdoor air worldwide. This makes Cladosporium one of the most commonly reported and abundant spore types both indoors and outdoors. The prevalence of this spore can vary throughout the year, but is especially high in late summer and autumn, especially where cereal crops are commonly planted.

An important and common allergen source.

Epicoccum

Outdoor Habitat: Epicoccum is a widespread cosmopolitan that grows on dead or decaying organic matter, wood, textiles, paper, a variety of foods, insects and human skin. It is commonly found in the soil. Epicoccum spores are more prevalent on dry, windy days, with higher counts late in the day.

Indoor Habitat: Capable of growing on a wide variety of substrates and manufactured products found indoors when wetted such as gypsum board, floors, carpets, mattress dust, and house plants.

Allergy Potential: Type I (hay fever, asthma)

Disease Potential: None known

Toxin Potential: None known

Comments: Very common in outdoor air in the summer months, especially in the midwest USA during harvest times.

Hyphae

Outdoor Habitat: Any cellulose-based substance that fungi can inhabit.

Indoor Habitat: Wetted wood and gypsum wallboard paper, etc.

Allergy Potential: Known to be allergenic.

Disease Potential: None known

Toxin Potential: None known

Comments: "Root-like" structures of fungal growth that can become airborne and can possibly be allergenic. When hyphae are found growing on a surface and associated with fruiting bodies and/or fungal spores, they indicate that growth has taken. Sometimes hyphae grow and do not produce spores. Hyphae are generally not specific to any particular type of fungus or mold type. A mass of hyphae on a surface is indicative of mold growth.

Penicillium/Aspergillus

Outdoor Habitat: Soil and decaying vegetation, textiles, fruits. These spores are commonly observed and are a normal part of outside air.

Indoor Habitat: Wetted wood and gypsum wallboard paper, textiles, leather, able to grow on many types of substrates.

Allergy Potential: Type I (hay fever, asthma), Type III (hypersensitivity pneumonitis)

Disease Potential: Opportunistic pathogen in immunocompromised persons, not normally a pathogen in healthy individuals.

Toxin Potential: Several known

Comments: Extremely common in indoor air in low to moderate amounts as compared to the outside air. This type of spore should not be present in very high numbers as compared to the outside (control) nor constitute an overwhelming percentage (e.g., 90% or greater) of the total spores in that room(s). However, this type of mold spore is not always detected in outside air and when diversity of mold types are low in the indoor sample(s), their percentage can be 90% or more. Therefore, when the raw numbers are low the determination would be NORMAL even if the percentage is high.

There is a wide range of what is a NORMAL amount of this type of mold spores in indoor air and 200 - 700 spores per cubic meter are commonly seen in homes.

These two genera are grouped together because they cannot be reliably differentiated into their respective genera based solely on spore morphology.

Unclassified Colorless Spores**Outdoor Habitat:** None specified**Indoor Habitat:** None specified**Allergy Potential:** Although no specific allergic potential can be given, ALL spores have the potential to be allergenic.**Disease Potential:** None known**Toxin Potential:** None known**Comments:** This category is for unknown spores that have no pigmentation / color and do not have enough distinctive characteristics to be identified as any particular type of spore that the laboratory recognizes.

There are a great many spore types that cannot be identified either because they are undescribed in the literature or new to science. Therefore, these types of spores are classified as "unclassified". There should not be an over abundance of this type of spore (or any spore) indoors. An large amount of this type of spore indoors would make this spore type as "water-indicating", but the origin and growth is not known.