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O2 ENVIRONMENTAL

FULL MOLD GLOSSARY & O2 HEALTH CONCERN INDEX

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O2 HEALTH CONCERN INDEX

The O2 Health Concern Index is an environmental interpretation framework developed by O2 Environmental to assist in contextualizing laboratory findings relative to potential health considerations.

This index does not establish safe or unsafe exposure limits and is not intended to provide medical advice.

Individual responses vary based on exposure level, duration, fungal type, susceptibility, immune status, and pre-existing conditions.

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MOLD ECOLOGY & HEALTH CONCERN INDEX

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Alternaria / Ulocladium

Ecology: Common plant-associated mold found outdoors and in damp indoor areas.

Typical Source: Plant material, condensation areas, damp drywall.

Allergic Potential: Type I (asthma and hay fever).

Potential or Opportunistic Pathogens: Rare sinus and cutaneous infections reported.

Health Considerations: May produce secondary metabolites; strong allergenic potential.

Water-Damage Indicator: Moderate

O2 Health Concern Index: 3 / 5

Ascospores

Ecology: Sexual spores from Ascomycota fungi; ubiquitous in outdoor environments.

Typical Source: Decaying vegetation, soil, outdoor air.

Allergic Potential: Allergenic potential varies by species.

Potential or Opportunistic Pathogens: Depends on genus and species.

Health Considerations: Typically reflects outdoor air infiltration.

Water-Damage Indicator: No

O2 Health Concern Index: 1–2 / 5

Aspergillus / Penicillium

Ecology: Common indoor/outdoor molds; elevated indoor dominance may indicate amplification.

Typical Source: HVAC systems, damp materials, stored contents.

Allergic Potential: Type I (asthma, hay fever); hypersensitivity pneumonitis possible.

Potential or Opportunistic Pathogens: Opportunistic pulmonary infections (e.g., aspergillosis) in immunocompromised individuals.

Health Considerations: Some species may produce mycotoxins depending on conditions.

Water-Damage Indicator: Moderate – Context Dependent

O2 Health Concern Index: 3–4 / 5

Basidiospores

Ecology: Spores from mushrooms and related fungi; common outdoors.

Typical Source: Vegetation, soil, forested areas.

Allergic Potential: Type I allergic responses.

Potential or Opportunistic Pathogens: Certain species associated with rare infections.

Health Considerations: Generally indicates outdoor infiltration rather than indoor growth.

Water-Damage Indicator: No

O2 Health Concern Index: 1–2 / 5

Cercospora ++

Ecology: Plant pathogen causing leaf spot diseases.

Typical Source: Outdoor vegetation; agricultural environments.

Allergic Potential: Unknown; likely allergenic in sensitive individuals.

Potential or Opportunistic Pathogens: Unknown.

Health Considerations: Not commonly associated with indoor amplification.

Water-Damage Indicator: No

O2 Health Concern Index: 1–2 / 5

Cladosporium

Ecology: Very common outdoor mold; can colonize damp indoor materials.

Typical Source: Outdoor air, plant debris, damp building materials.

Allergic Potential: Type I (asthma and hay fever).

Potential or Opportunistic Pathogens: Rare sinus, skin, or pulmonary infections reported.

Health Considerations: Primarily allergenic; may be elevated in water-damaged materials.

Water-Damage Indicator: Weak–Moderate

O2 Health Concern Index: 2 / 5

Ganoderma

Ecology: Shelf fungus growing on hardwoods and conifers.

Typical Source: Outdoor wood sources; decaying tree material.

Allergic Potential: Known allergen worldwide.

Potential or Opportunistic Pathogens: Unknown opportunistic risk.

Health Considerations: Typically outdoor in origin; rare indoor growth.

Water-Damage Indicator: No

O2 Health Concern Index: 2 / 5

Myxomycetes ++

Ecology: Slime molds found on decaying vegetation and mulch.

Typical Source: Outdoor mulch beds, lawns, decaying wood.

Allergic Potential: Type I allergic potential.

Potential or Opportunistic Pathogens: Unknown.

Health Considerations: Usually outdoor-related; rarely structural.

Water-Damage Indicator: No

O2 Health Concern Index: 1–2 / 5

Rusts

Ecology: Plant parasites requiring living plant hosts.

Typical Source: Outdoor vegetation and agricultural settings.

Allergic Potential: Type I (hay fever, asthma).

Potential or Opportunistic Pathogens: Unknown opportunistic risk.

Health Considerations: Not associated with indoor structural growth.

Water-Damage Indicator: No

O2 Health Concern Index: 1 / 5

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DISCLAIMER

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This glossary and O2 Health Concern Index are provided for environmental interpretation purposes only. The index reflects relative health-related considerations based on published literature and industry guidance. No universally accepted exposure limits exist for indoor fungal concentrations. This document does not diagnose medical conditions, establish habitability, or replace consultation with a qualified healthcare provider. Individuals experiencing symptoms should consult a licensed physician experienced in environmental or occupational medicine.

Prepared By: O2 Environmental

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