AquaLab Mold Potential Meter 1.0 Quickstart Guide

Welcome to your new Mold Potential Meter for measuring water activity(a_w) and equilibrium relative humidity of building materials. This instrument reports reading in decimal form as water activity instead of ERH. Surface water activity is the same measurement as surface ERH just expressed as a decimal rather than a percent. In microbiology the term water activity is used instead of ERH when referring to microbial growth limits of available moisture. Please find the water activity growth limits chart on the other side of this quickstart for your reference.

Getting Started

On or with your meter you will find:

-<u>LCD</u>: Displays water activity value and temperature.

-Button 1: Power/Next test button. Press this button to begin a test.

<u>-Button 2</u>: Once a reading is finished, the right button will be active. Use Button 2 to adjust the calibration of the instrument if it is not measuring within specification. You can use salt solutions or contact Decagon if you need to calibrate the instrument.

<u>Screws</u>: Use these to secure the Mold Potential Meter 1.0 to the surface being measured. Blue painters tape can also be used in situations where you don't want to leave screw holes.

Measurement Screen

Reading is complete when your meter 'beeps' and the sunburst icon disappears. The meter is accurate to +/-.02 water activity units and it displays temperature with measurement.

Attachment

After monitoring building materials with an infrared camera and or a moisture meter throughout the drying process, identify a few suspect areas to verify mold growth potential. Insert the provided screws into the holes in the face of the meter. The small black o-rings can be slipped over the screws to keep them from falling out of the meter. To attach the meter firmly to the substrate hold it with one hand. With the other hand tighten the screws, alternating from screws, until the meter is firmly attached to the substrate and the rubber gasket has a good seal with the substrate. Please note that if the meter is not firmly sealed to the substrate, the ambient RH corrupts the true the ERH or water activity reading of the substrate.

Maintenance

Underneath the white foam filter is the capacitance sensor that measures the water activity or ERH of the air between the meter and the substrate. If the filter becomes contaminated contact Decagon for a new filter.

Thermopile Sensor-This sensor measures the temperature. If this sensor becomes contaminated clean with isopropyl alcohol and rinse with distilled water (with a clean cotton swab or Kimwipe).

Specifications:

Accuracy: +/-.02 a_w Range: 0 to 1.0 a_w Resolution: +/-0.01 a_w Read Time: 3 to 5 minutes

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Microbial Response to Water

Water Activity **a**w 0.9996 0.9990 0.9949 0.9891 0.9869 0.9798 0.9698 0.9642 0.9500 0.9100 0.8700 0.8000 0.7500 0.6500 0.6000

John Zeugschmidt



Microbial Response to Water

