



T: 02 8212 4074 F: 02 9423 6992
info@keydiagnostics.com.au
www.keydiagnostics.com.au
PO Box 1038, Gymea, NSW, 2227

Quick Start Guide

Pawkit Water Activity Meter



The Setup

Congratulations on your new Pawkit Water Activity Meter. This guide will help you begin gathering data in just a few short steps.



Place in a stable environment away from air ducts, vents, heaters, etc.



Wash hands.

LCD

Displays water activity value and temperature.

Button II

Once a reading is finished, the right button (II) will be active. Button II can be used to adjust the calibration of the instrument if it is not measuring within specifications.

Button I

Power/New Test button.

Note: Using button II to adjust the calibration should only be done when the instrument is not measuring within specifications and has been thoroughly cleaned and retested with the 0.760 standard.

Sample Cup

Use a new sample cup for each test.



What's Included?

Carrying Case

Contains Pawkit instrument, manual, sample cups, and standards.



Operator's Manual

Instrument instructions and care.

Sample Cups*

Case includes 10 initial sample cups.

Verification Standards

If you don't have two boxes go to store.aqualab.com to purchase.

Pawkit

Handheld water activity meter.

* Periodically purchase at store.aqualab.com

Verification vs. Calibration

Verification

Your instrument needs to be verified with a primary and a secondary verification standard every day. Standards are salt solutions with known water activities. Measuring one standard at the bottom of a water activity range and one towards the top of the range will alert the operator to shifts in the calibration.

Calibration

If a shift occurs and you notice that the standard isn't measuring in spec, the first thing you need to do is clean the instrument. If the standard is still not measuring in spec after cleaning you can adjust the calibration up or down using the .920, .760, or the .250 standard.



*Standards come in boxes of 50 plastic disposable vials and the four types you can use with the Pawkit for verification include the .920, .760, and the .250.

*Note: Adjusting the calibration of the instrument should only be done when the verification standards are reading out of spec.

If you need help determining which standards to use to verify your instrument or you can't get you instrument to measure within spec of the standards, please contact AquaLab Customer Support support@aqualab.com or 509-332-5601.

Daily Verification-Step One

Primary Standard

- 1 Locate a vial of the 0.760 Water Activity Standard that is inside the carrying case with your instrument or in a box purchased separately (Blue).

Note: Note: Each Pawkit case contains a set of trial vials. You will need to order more standards for your daily verification of the instrument.

- 2 Twist off cap of the 0.760 vial and pour the contents into a sample cup.

- 3 Place the Pawkit over the sample cup and turn on the instrument by pushing the left button. If the instrument is already on just press the left button again to start another reading.



Important!

The lids with the cups are used to prevent moisture loss or gain-if you do not immediately test samples. Do not place a sample cup with a lid under the Pawkit.

Measurement Screen



Reading in Process- sunburst icon above a_w.

Reading in process

Reading is still in process if you see the sunburst  icon.



Final Reading- no sunburst icon above a_w.

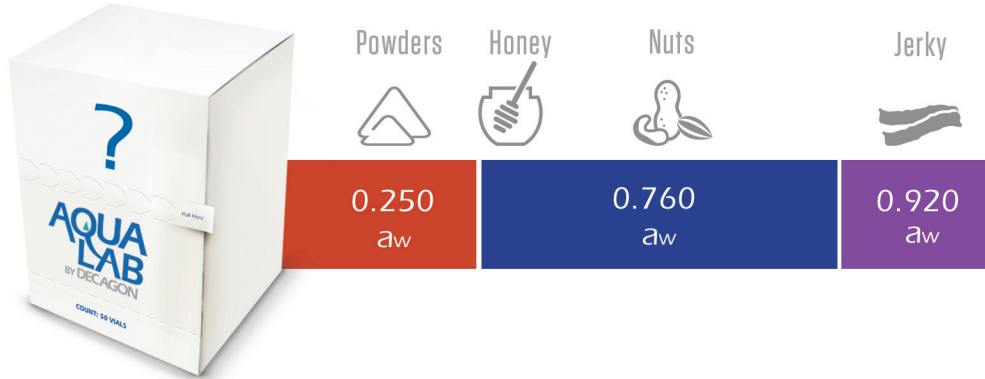
Reading complete

Reading is complete when your Pawkit 'beeps' and the sunburst icon disappears.

If the standard measures between 0.74 and 0.78, move on to the second verification standard. If not, clean the instrument and retry.

*Accuracy of the Pawkit ± 0.02

Determine Secondary Standard



- 1** Identify range of water activity for your product(s).
- 2** If the product you are about to test has a high water activity above .76, use the .92 as your second standard. If the product you are about to test has a low water activity below .76, use the .25 standard as your second standard.
- 3** Conduct a two-point performance verification daily. If you need guidance on which two standards to use, please contact us: Email: support@aqualab.com, or call us at: 509.332.5601.

Need vials? Go to <https://store.aqualab.com>

Secondary Standard

- 4 Locate a vial of the Secondary Verification Standard (0.250, or 0.920) that came with your instrument or that you purchased separately.
- 5 Twist off vial cap and pour contents into a new sample cup.
- 7 Take a reading of the second standard by placing the Pawkit over the cup and pressing the left I button.



Error!

Standard not measuring in specification.

If the instrument doesn't measure within specifications, clean the chamber and retry. See Chapter 5 in your Operator's Manual if the issue persists or contact AquaLab Customer Support.

Product- Step 3

Ready! Sample Test



- 1 Place a sample of your product in a new sample cup.
- 2 Cover the bottom of the sample cup as much as possible.
- 3 If your product is larger than the cup, it will be necessary to make the product smaller to fit the sample cup.
- 4 Ensure the rim and outside of the sample cup are clean.
- 5 If you don't immediately test the sample, cover it with a lid to avoid moisture loss or gain.
- 6 Ensure sample temperature is within 4°C of the instrument temperature.

Warning!

Do not overfill the sample cup
(no more than half full)

Maintenance

AquaLab offers an Annual Calibration Service which includes:

- Factory calibration.
- Firmware update.
- Thorough cleaning.
- Free loaner instrument to use upon request.
- Current calibration certificate to keep on file for auditing purposes.

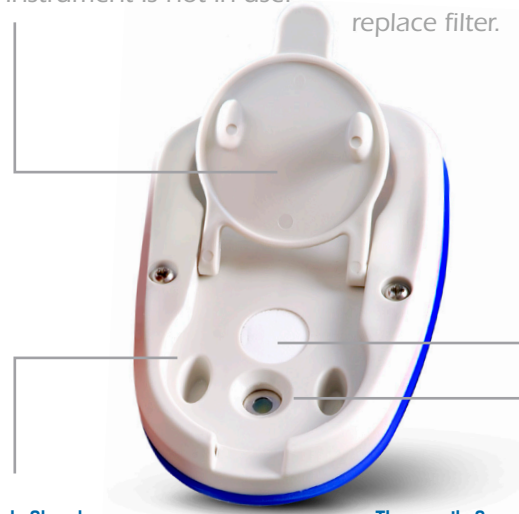
Instrument Components

Sensor Cover

Cover the chamber components when instrument is not in use.

Sensor Filter

Do not moisten during cleaning process. If filter becomes contaminated, replace filter.



Sample Chamber

Cover sample cup with chamber. Purchase more cups: store.aqualab.com

Thermopile Sensor

Clean regularly with Cleaning Kit materials.

Complete moisture analysis with these AquaLab products:



Series 4
Water Activity Meter.



4TE
Water Activity Meter.
Temperature Control
(Between 15-50°C).



4TEV
Water Activity Meter.
Temperature Control
(Between 15-50°C).
Volatiles Sensor.



DUO
Moisture Analyzer.
Water Activity.
Moisture Content.



VSA
Vapor Sorption Analyzer.
Dynamic & Static Moisture
Sorption Isotherm generation.



Standard Vials
Performance Verification Standards
Boxes of 50 single use vials.



Sample Cups
Fits all AquaLab instruments.
Contains 500 cups per case.



AquaLink 4
Data Management Software.
Backup, graph, and share
your data.

Need supplies? Go to <https://store.aqualab.com>

Complete Moisture Analysis



USA AquaLab Sales 509-332-2756
USA AquaLab Customer Support 509-332-5601
Service outside USA, contact your local distributor

Copyright ©2015 Decagon Devices, Inc.
2365 NE Hopkins Court, Pullman, WA 99163
10341

PRINTED IN USA