



aWLife

Dew Point Water Activity Meter

Benchtop

water activity
meter

STEROGLOSS



aWLife:
the instrument that revolutionizes
your quality control process!



aWLife represents the state-of-the-art in water activity (aW) meters, and today it is an essential instrument for the quality control of products and ingredients in the food, pharmaceutical and cosmetic industries.

Wherever it is necessary to study a product's shelf life in order to determine its risk of microbial development and therefore how long it will keep over time, **aWLife** is the answer.

aWLife is also the top-performing instrument on the market, thanks to its dew point sensor, which measures the actual water activity (aW), and not related secondary parameters. For this reason, the dew point sensor is considered the benchmark for these measurements.

New calibration and control modes allow the operator to

optimize times even for multiple analyses of samples with very different water activity (aW) values. With the introduction of innovative calculation and temperature control systems, **aWLife** allows you to perform different types of analyses: from simple control measurements to specific shelf life tests for each individual case.

aWLife's latest generation touch screen graphic display, Wi-Fi and USB compatibility ensure a simple, intuitive workflow, allowing automatic data saving and immediate recognition of the sample and the operator, as well as communication with PCs and external memory cards.

aWLife is certifiable and in compliance with the latest ISO standards.



aWLife

A brand new analysis cell, multiple hardware and software upgrade make aWLife the utmost instrument to analyse the most critical values of water activity mainly in freeze-dried products, products with high a_w values and with interfering substances. Moreover, aWLife is minimally affected by adverse environmental conditions.

- Low noise thanks to excellent ventilation system
- Precise sample temperature measurement and control system for best data accuracy
- Measurement cell with specific insulation system eliminates thermal and electromagnetic interferences
- Inlet for temperature control inside the cell by means of certified external temperature probe
- Selective single-point calibration for each type of standard

General features:

- Water activity meter (aW) in compliance with ISO 18787:2017 standards
- 7-inch, latest-generation, color touchscreen graphic display
- User-friendly software management software with pop up and notification system for easy workflow
- USB ports for connection to a PC and for downloading data onto mobile memory cards
- Ethernet interface for connection to a PC and/or local networks for data acquisition
- Total data management flexibility - from storing information, producing graphs to saving operators names
- Connection to a barcode reader and thermal impact printer
- aWLife comes with aWdata software for data management and remote control

Accessories:

- Cups and lids suitable both for aWLife and other aW analyzers
- Unsaturated calibration standards
- Cleaning kit
- Barcode reader and thermal impact printer



Technical specifications:

Activity water

- Measuring range: from 0,030 a 1,000 aW
- Accuracy: $\pm 0,003$ aW at $+25^{\circ}\text{C}$
- Repeatability (standard deviation): $\pm 0,001$ aW
- Calibration:
 - Selective Calibration at 7 points (0,150 - 0,250 - 0,500 - 0,760 - 0,920 - 0,984 - 1,000) for Steroglass and non-Steroglass unsaturated standards
 - Single point Calibration, at any point settable by the user, for saturated standards at any value
- Equilibrium/measurement times: < 5 minutes
- Sensor: Dew point sensor required by ISO 18787:2017) Sensor block with front opening for easy sample insertion and cleaning. Equipped with a fan for uniform headspace, a high-seal chamber with a seal that guarantees very little environmental interference
- Display resolution: ± 0.0001 aW (4 decimal places)
- Security: administrator management and up to 15 users via password (in compliance with CFR21 Part 11 - guarantee of data immutability)
- Software for external PC in bidirectional Windows environment in compliance with Industry 4.0
- Access hole for temperature check, block with certified external probes

Temperature

- Complete sample thermostating: at $+25^{\circ} \pm 1^{\circ}\text{C}$ (adjustable from $+15^{\circ}\text{C}$ to $+50^{\circ}\text{C}$)
Real sample temperature reading with dedicated infrared sensor (also equipped with temperature indicator for the lid and the base of the reading block and cooled mirror temperature sensor)
- Operating range at room temperature: $+5^{\circ}\text{C}$ to $+50^{\circ}\text{C}$
- Digital resolution: 0.01°C
- Accuracy: $\pm 0.2^{\circ}\text{C}$
- Uncertainty: $\pm 0.2^{\circ}\text{C}$



Discover the Future of Product Safety and Quality with aWLife

The aWLife analyzer, designed and manufactured by Steroglass in Italy, represents the most advanced, reliable and innovative solution for studying the shelf life of food, cosmetics, pharmaceuticals, and pet food products.

Why use aWLife?

- **Cutting-Edge Technology:** thanks to dew point sensor technology, aWLife ensures precise and reliable measurements of water activity (aW) which is a critical parameter for determining product shelf life.
- **Versatility:** ideal for a wide range of sectors, from food to cosmetics and pharmaceuticals, aWLife perfectly adapts to the needs of every laboratory.
- **Reliability:** each high quality component of aWLife is designed to last over time and maintain a steady level of performance and accurate results.

Advantages of aWLife:

- **Precision:** Accurate measurements of water activity, essential for determining shelf life and ensuring product safety.
- **Ease of Use:** User-friendly interface makes analysis simple and accessible even for non-experts users
- **Support and Assistance:** Steroglass offers excellent customer service, with technical support always available to ensure the instrument always performs at its best.

Main applications



Food Industry

aW analysis allows for control of the shelf life and safety of packaged foods, preventing growth of microorganisms thus ensuring product quality



Cosmetics

aW analysis ensures their stability over time



Pharmaceuticals

aW analysis ensures their stability and longevity



Pet food

aW analysis to make sure that pet food remains fresh and safe throughout its commercial life

21 CFR Software for aWLife

Regulatory Compliance Support for Regulated Pharmaceutical Environments

The 21 CFR software developed by Steroglass® is designed to support customers in achieving compliance with FDA 21 CFR Part 11 regulations when used in conjunction with appropriate operating procedures and system validation activities.

Integrated with the aWLife instrument, the software enables secure, traceable, and compliant management of electronic records, facilitating the implementation of best practices required in regulated environments.

Regulatory Compliance

The software is designed to support the requirements of:

- FDA 21 CFR Part 11 - Electronic Records and Electronic Signatures
- EU GMP Annex 11 - Computerized Systems in the European regulatory framework

Note: Final compliance remains the responsibility of the user, who must implement appropriate procedures, controls, and validation activities.

STEROGLASS® Solutions for Regulated Environments

The software has been developed in accordance with the principles of FDA 21 CFR Part 11. However, achieving and maintaining regulatory compliance remains the responsibility of the end user, who must ensure proper system validation, configuration, and operation in accordance with internal procedures and applicable regulatory requirements.

Ideal for pharmaceutical companies and regulated laboratories requiring secure, traceable, and 21 CFR Part 11-compliant data acquisition and management.

Key Features

DATA INTEGRITY: Data Integrity and Security

- Data acquisition with immediate record immutability
- Protection against unauthorized modifications
- Database designed to ensure data integrity and resistance to corruption

Comprehensive Audit Trail

- Automatic tracking of all system and user activities, including identification of who performed the action and the reason for it
- Secure, tamper-proof event history
- Valuable support tool during audits and regulatory inspections

User and Access Management

- Username and password authentication with configurable password complexity requirements (minimum length, special characters, numeric characters, and uppercase letters)
- User role and access level management, allowing or restricting access based on authorization level
- Unique operator identification

Electronic Signatures

- Every critical operation requires an electronic signature confirmation, including mandatory entry of the reason for the action. Once processed, a new audit trail entry is automatically generated.

System Architecture

- Dedicated external software, with a license associated with a single aWLife unit
- System designed for regulated environments
- The system operates in a Windows environment
- Software can only be installed on a Windows PC provided by the customer



DATA INTEGRITY

Steroglass® has been one of the leading companies in the scientific field for its remarkable expertise and technical application assistance as well as its specific and unique range of products. We aim to design, develop, produce and trade innovative and high quality products in order to provide our customers with best possible solutions required by the market.



CERTIFICATED TECHNICAL ASSISTANCE

Our experience
at your disposal

TECHNICAL/ANALYTICAL ADVICE
TECHNICAL MAINTENANCE CONTRACTS
REPAIR/SETTING/CALIBRATION

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

STEROGLOSS s.r.l.
Via Romano di Sopra, 2/C
06132 - S.Martino in Campo
PERUGIA - ITALY
Tel. +39 075 60 90 91
Fax +39 075 60 90 950

www.steroglass.it
info@steroglass.it



Steroglass



Steroglass S.r.l.



Representantes / Distribuidores Autorizados

Argentina

Tel: (+54 11) 5352 2500

Email: info@dastecsrl.com.ar

Web: www.dastecsrl.com.ar

Dew Point Water Activity Meter