

CleanTrust ATP Surface Swab

USER MANUAL

Product No.: YL0002

Overview

ATP is the abbreviation of the chemical substance adenosine triphosphate. It is commonly found in all living cells including microorganisms. Its main function in the cell is to provide energy.

Based on the principle of firefly luminescence, the "luciferase-luciferin system" can be used to quickly detect the ATP content in the test environment, making it easier to monitor the hygienic status of the surface of processing equipment and other various industrial environments.

Under the catalysis of luciferase, ATP present in the sample reacts with luciferin to produce fluorescence, and the fluorescence intensity (RLU) is proportional to the ATP content. The higher the RLU value, the higher the ATP content and the dirtier the surface.

Applicable Scope

Stainless steel surface.

AOAC RI Performance Tested MethodSM Certification

The detection of ATP on stainless steel surfaces using the CleanTrust ATP Surface Swab (YL0002) with the Elaboric Clean Trust Touch Luminometer (YZ3500/YZ3500S) has certified by the AOAC Research Institute with AOAC RI *PTM* Certification (License #042601).

While official validation studies were conducted using the YZ3500, the YZ3500S is a fully equivalent system. Both models share identical internal components and technical specifications, differing only in their exterior housing and user

interface design.

Kit Composition

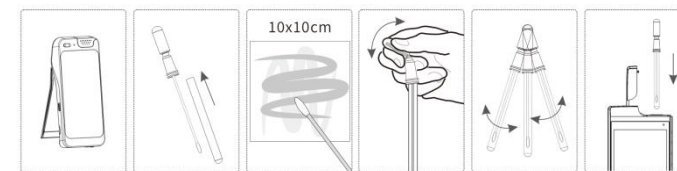
Composition	Quantity
ATP Surface Swab	100 tests
Instruction	1 copy

Applicable Instruments

Luminometer+Swab	Sensitivity
YZ3500+YL0002	5×10^{-16} mol
YZ3500S+YL0002	5×10^{-16} mol

Operation Procedure

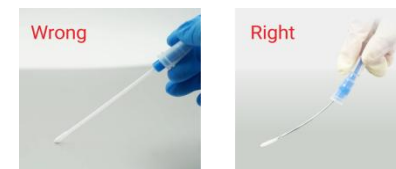
- 1) Turn on the instrument's power, and wait for the main interface to load. Tap on the Detection icon to enter the detection interface, set the threshold and the operator's name for future reference.
- 2) Before using the ATP surface swab, bring the swab to room temperature (20-25°C). Holding the swab firmly, twist and pull the top of the swab out of the tube.
- 3) Remove the room temperature-equilibrated swab from its tube (pre-wetted design, no additional processing required). Hold the swab at a 45° angle to the surface and wipe the 10×10 cm area in a zigzag pattern. Repeat the wiping motion until the entire target area is fully sampled. For irregular surfaces, ensure that each control point is tested using the identical wiping protocol to guarantee result accuracy. Return the swab to its original tube.
- 4) Hold the swab tube firmly and break the snap-valve by bending the bulb back and forth. Squeeze the bulb twice to release all the liquid down the swab shaft.
- 5) Bathe the swab bud in the liquid by shaking for 10 seconds. Once activated, the sample must be read in the luminometer within 30 seconds.



- 6) Open the door of the detection chamber and immediately insert the swab vertically into the detection chamber. Close the door of the detection chamber. The luminometer will automatically perform the analysis program.
- 7) After detection is complete, open the door of the detection chamber, remove the swab and close the door.

Note

- Do not touch the swab or inside the sampling device with your fingers.
- While collecting the sample, rotate the swab to maximize the amount of sample collected at the tip of the swab.
- Apply enough pressure to bend the swab shaft.



- Keep the instrument upright.

Interpretation of Results

- The ATP Surface Swab is used with the YZ3500 or YZ3500S Luminometer. Thresholds and readings can be interpreted according to the table below.
- "Pass" is considered clean, "Caution" is not clean enough, and "Fail" is considered dirty.

Luminometer	Threshold ^a	Result
YZ3500/YZ3500S	0-20	Pass
	20-60	Caution
	>60	Fail

a: These are factory default thresholds. Users may modify them as needed.

Storage and Validity

2-8°C , store away from light, valid for 12 months.

Disposal

The CleanTrust ATP device is made of 100% recyclable plastic and can be disposed of accordingly.

Safety and Precautions

- The components of the CleanTrust ATP present no health hazards when handled strictly according to the standard laboratory practices and procedures of this insert.
- Designed exclusively for one-time application. To ensure test accuracy, please discard after initial use.
- For comprehensive handling precautions, please consult the Safety Data Sheet (SDS).

Manufacturer :

Elaboric Biotechnology Co., Ltd.

Address: Building 10, No.58 Shenzhen West Road, Kuishan Sub-district, Economic Development Zone, Rizhao City, Shandong Province, China.

Email: info@yili-bio.com Tel: +86 532 55678026

www.yili-bio.com