UltraSnap® Surface ATP Test

For use with Hygiena® ATP Monitoring Systems

Product No. US2020 (100 tests)

PERFORMANCE TESTED AOAC RESEARCH INSTITUTE LICENSE NUMBER 101803

Introduction

Description and Intended Use

UltraSnap® Surface ATP Test is a self-contained device for use with Hygiena® luminometers. The test device and luminometer create a system used for monitoring the hygienic status of surfaces on processing equipment and other environments in a wide range of industries. The system works by measuring adenosine triphosphate (ATP), the universal energy molecule found in all animal, plant, bacterial, yeast and mold cells. Product residues from organic matter left on surfaces contain ATP. Microbial contamination on a surface also contains ATP but typically in smaller amounts. After proper cleaning, all sources of ATP should be significantly reduced.

When a sample is collected and ATP is brought into contact with the unique liquid-stable luciferase/luciferin reagent in the UltraSnap test device, light is emitted in direct proportion to the amount of ATP present in the sample. The luminometer measures generated light and reports results in Relative Light Units (RLUs). RLU results provide information on the level of contamination within seconds. The higher the RLU number, the more ATP is present and the dirtier the surface.

Intended User

Laboratory personnel trained in standard laboratory practices are qualified to use UltraSnap devices.

Applicability

UltraSnap devices are applicable for the measurement of ATP from environmental surfaces. The method was validated through the AOAC Research Institute *Performance Tested Methods*℠ (*PTM*) Program for a range of foods, including major food groups such as meat, dairy and beverages. For details, refer to AOAC RI *PTM* Certificate 101803 at www.hygiena.com/documents.

Limitations

UltraSnap tests are designed to detect invisible/trace amounts of residue. Overloading the swab with physical matter by swabbing a visibly dirty surface will inhibit the bioluminescent reaction and produce inaccurate results.

For water samples such as clean-in-place (CIP) rinse water testing, use AquaSnap® Water ATP Test Devices (Product No. AQ-100X and AQ-100FX). Visit www.hygiena.com for more information.

Important Tips and Notes Before Starting the Test

- Allow the UltraSnap device to equilibrate to room temperature (21 to 25 °C) before use.
- The swab tip is pre-moistened for maximum sample collection.
- Condensation may be visible on the inside of the swab tube; this is normal.
- Turn on the luminometer. If the luminometer has been programmed with test locations, select the appropriate location before running the test.

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Test Procedure

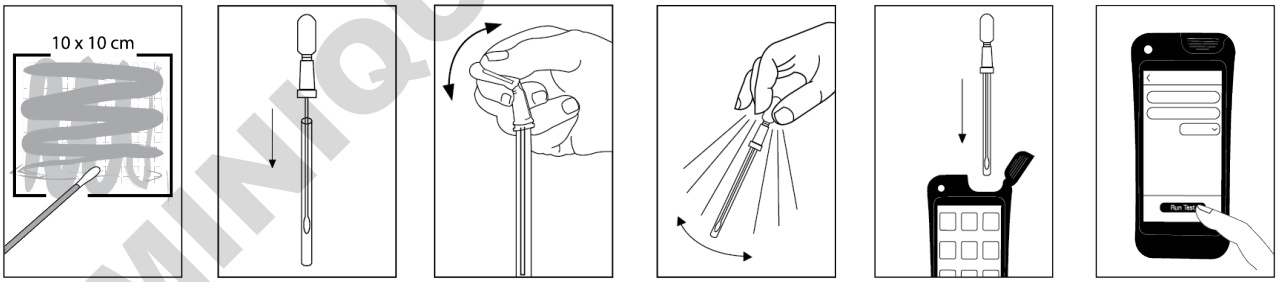
1. Holding the swab tube firmly, twist and pull the top of the swab out of the tube.
2. Thoroughly swab a standard 10 x 10 cm (4 x 4 inch) area for a typical flat surface.

   Important swabbing technique tips:

   - For irregular surfaces, maintain a consistent swabbing technique during each test; swab a large enough area to collect a representative sample.
   - Do not touch the swab or the inside of the sample device with your fingers.
   - Swab in a crisscross pattern vertically, horizontally and diagonally in both directions.
   - Rotate the swab while collecting the sample to maximize sample collection on the swab tip.
   - Apply sufficient pressure to create flex in the swab shaft.
3. Replace the swab back in the swab tube.
4. To activate the device, hold the swab tube firmly and use your thumb and forefinger to break the Snap-Valve by bending the bulb forward and backward. Squeeze the bulb twice to expel all the liquid down the swab shaft.
5. Bathe the swab bud in the liquid by shaking for 5 – 10 seconds. Once activated, the sample must be read in the luminometer within 30 seconds.
6. Holding the luminometer upright, insert the entire UltraSnap device into the Hygiena luminometer.
7. Refer to the instrument manual for operating instructions. In brief:

   a. If using the EnSURE® Touch luminometer, close the lid and press “Run Test” to initiate the measurement. Results will be displayed in 10 seconds.

   b. If using the EnSURE® or SystemSURE *Plus*® luminometer, close the lid and press "OK" to initiate the measurement. Results will be displayed in 15 seconds.



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Additional Information

Interpretation of Results

Hygiena luminometers are preset with Pass and Fail RLU limits (Table 1) that are based on industry standards and published study recommendations.

Table 1. Default RLU-Limit Settings for Hygiena Luminometers.

Interpretation	EnSURE Touch (RLUs)	EnSURE or SystemSURE *Plus* (RLUs)
Pass (Clean)	≤20	≤10
Caution* (Warning)	21 – 59	11 – 29
Fail (Dirty)	≥60	≥30

* Cleaning is not adequate.

Hygiena recommends setting RLU thresholds according to the standards of your facility. For guidance, view the technical bulletin, *Lower and Upper RLU Limits for ATP Monitoring Programs*. To get the most out of your system, use SureTrend® software to track and trend testing performance over time.

For technical documents, refer to the resources available at www.hygiena.com/documents. Contact your local sales representative or regional technical services team for additional support.

AOAC RI *Performance Tested Method*℠ Certification

The detection of ATP using the UltraSnap Surface ATP Test with Hygiena luminometers (EnSURE Touch and EnSURE instruments) has earned AOAC RI *PTM* Certification (License #101803) from the AOAC Research Institute.

The matrices included in the AOAC validation studies (Table 2) are representative of stainless-steel surfaces in food processing and manufacturing facilities.

Table 2. Matrices Included in AOAC Validation Studies.

Residues on Stainless Steel Surfaces (10 x 10 cm)
Doughnut
Orange juice
Raw lamb
Ready-to-eat duck wrap
Yogurt

Calibration and Controls

It is advisable to run positive and negative controls according to Good Laboratory Practice. Hygiena offers the following controls:

- ATP Positive Control Kit for ATP Test Devices (Product No. CK25)
- CalCheck LED Calibration Verification Device (Product No. CAL)

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Storage and Shelf Life

- Recommended storage is 2 to 8 °C (36 to 46 °F).

  Before use, devices may be stored at room temperature (20 to 25 °C) for up to 4 weeks.
- Store UltraSnap devices out of direct sunlight.
- Do not use past the expiration date on the label.

Disposal

UltraSnap devices are made of 100% recyclable plastic and may be discarded accordingly.

Safety and Precautions

- Components of UltraSnap devices do not pose any health risk when used in accordance with standard laboratory practices and procedures of this insert.
- UltraSnap test devices are for one-time use. Do not reuse.
- For further safety instructions, refer to the Safety Data Sheet (SDS).

Hygiena Liability

Hygiena will not be liable to the user or others for any loss or damage, whether direct or indirect, incidental or consequential from use of these devices. If this product is proven to be defective, Hygiena's sole obligation will be to replace the product or at its discretion, refund the purchase price. Promptly notify Hygiena within 5 days of discovery of any suspected defect and return the product to Hygiena; please contact Customer Service for a Returned Goods Authorization Number.

Contact Information

For more information, visit www.hygiena.com/contact. For technical support, visit www.hygiena.com/support.

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