

SuperSnap[®] High Sensitivity ATP Test

For use with Hygiena[®] ATP Monitoring Systems Product No. SUS3000 (100 tests, with azide) and SUS3000X (100 tests, no azide)

Introduction

Description and Intended Use

SuperSnap[®] tests are self-contained, highly sensitive devices that detect ATP (adenosine triphosphate) when used with Hygiena[®] luminometers. This system is used for hygiene monitoring, HACCP-related monitoring of processing equipment, cleaning validation and other environmental monitoring, such as allergen detection and prevention programs. SuperSnap devices are designed to detect very low levels of organic residue with a tolerance for harsh samples that could affect the bioluminescent reaction. As an allergen prevention tool, SuperSnap tests can be used to verify the efficacy of cleaning procedures for the removal of product residues that may contain potential allergenic material. The enhanced sensitivity of SuperSnap tests allows the detection of product residues down to 1 - 1,000 ppm depending on product matrices; this is comparable to or better than the detection capabilities of allergen-specific test methods.

The system works by measuring 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 SuperSnap 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), providing information on the level of contamination within seconds. The higher the RLU number, the more ATP is present in the sample and the dirtier the surface.

Note: SuperSnap 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.

Important Tips and Notes Before Starting the Test

- Allow the SuperSnap 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.



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.
- Use aseptic techniques: 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 SuperSnap 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.















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.

SuperSnap tests are highly sensitive and produce more light per ATP molecule than other Hygiena tests. For example, SuperSnap tests are approximately 4 times more sensitive than UltraSnap[®] tests (Product No. US2020). Using preset limits with SuperSnap tests will increase the standard of cleanliness; this is recommended when using SuperSnap tests as part of an allergen detection and prevention program.

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 with Hygiena luminometers to track and trend testing performance over time.

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

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)

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 SuperSnap devices out of direct sunlight.
- Do not use past the expiration date on the label.

Disposal

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

Safety and Precautions

- Components of SuperSnap devices do not pose any health risk when used in accordance with standard laboratory practices and procedures of this insert.
- SuperSnap 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 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 <u>www.hygiena.com/contact</u>. For technical support, visit <u>www.hygiena.com/support</u>.