

## AquaSnap® Total and AquaSnap® Free Water ATP Tests

### For water samples

Product No. AQ-100X (AquaSnap Total, 100 tests)

Product No. AQ-100FX (AquaSnap Free, 100 tests)

## Introduction

### Description and Intended Use

AquaSnap® water testing devices are self-contained ATP tests for use with Hygiena® luminometers. Tests are used to monitor ATP levels in water as a quality indicator in areas like clean-in-place (CIP) systems and rinse water samples. They are also used for water treatment applications in healthcare and monitoring biomass in cooling towers. AquaSnap Total measures both ATP contained within living cells and particulate matter (microbial ATP) as well as ATP dissolved in water (non-microbial or dead microbial ATP). AquaSnap Free measures only dissolved ATP outside of living cells (non-microbial ATP). Used together, AquaSnap Total and AquaSnap Free can be an effective quality monitoring system. The difference between Total and Free test results represents ATP from living organisms (also referred to as biomass).

Total ATP = Free ATP + Microbial ATP; therefore,

Microbial ATP = Total ATP – Free ATP

For more information about the differences between AquaSnap Total and AquaSnap Free, visit [www.hygiena.com](http://www.hygiena.com).

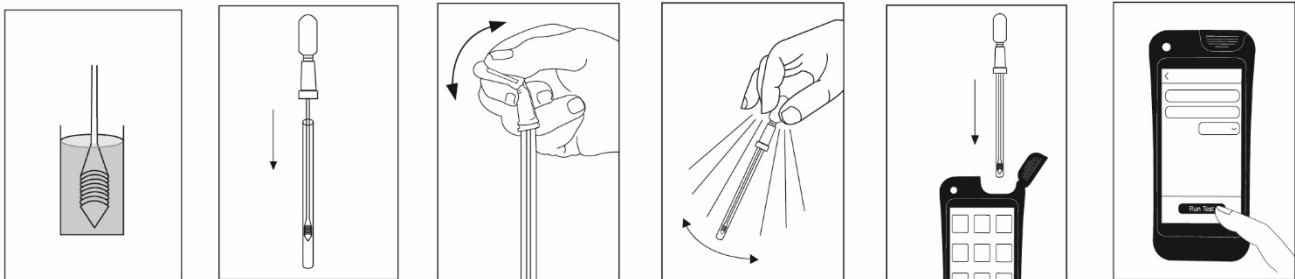
### Important Tips and Notes Before Starting the Test

- Allow the AquaSnap device to equilibrate to room temperature (21 to 25 °C) before use.
- Turn on the luminometer. If the luminometer has been programmed with test locations, select the appropriate location before running the test.
- Use one of the following sampling recommendations when using both AquaSnap Total and Free:
  - When possible, split the water sample into two aliquots. Dip each AquaSnap test (Total and Free) in a separate aliquot of the same water sample.
  - If two aliquots of the water sample cannot be made and two devices must be dipped in the same sample container, first use AquaSnap Free followed by AquaSnap Total.



## Test Procedure

1. Forcefully flick the device in a downward motion to shake the liquid extractant from the sample collection dipper to the bottom of the tube.  
Note: this is important for accurate extraction of ATP and helps with sample collection consistency.
2. Holding the tube firmly, twist and pull the top of the collection dipper out of the tube.
3. Submerge the collection dipper in the water sample for 1 – 2 seconds.
4. Lifting vertically, remove the collection dipper from the sample and reinsert into the tube.
5. Gently shake the device for 1 – 2 seconds to mix the water sample with the extractant at the bottom of the tube.
6. To activate the device, hold the 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 into the tube.
7. Shake for 3 – 5 seconds to mix the sample. Once activated, the sample must be read in the luminometer within 15 seconds.
8. Holding the luminometer upright, insert the entire AquaSnap device into the Hygiena luminometer.
9. 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 recommends setting RLU thresholds according to user's test application. Higher RLU results indicate higher contamination in the sample. In clean or treated water samples, Free ATP results are similar to Total ATP results. In some circumstances, when organic matter is present and where microbial contamination is low, Total ATP results may appear lower than Free ATP results; this is normal and is due to the presence of extractant in AquaSnap Total. View the technical bulletin, *Lower and Upper RLU Limits for ATP Monitoring Programs*, at [www.hygiena.com/documents](http://www.hygiena.com/documents) or contact your local sales representative or regional technical services team for guidance.



## Calibration and Controls

It is advisable to run positive and negative controls according to Good Laboratory Practice. Hygiena offers the following control: 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 AquaSnap devices out of direct sunlight.
- Do not use past the expiration date on the label.

## Disposal

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

## Safety and Precautions

- Components of AquaSnap devices do not pose any health risk when used in accordance with standard laboratory practices and procedures of this insert.
- AquaSnap test devices are for one-time use. Do not reuse.
- Hold the AquaSnap test upright when activating.
- Read the AquaSnap test within 15 seconds of activation.
- Hold the luminometer upright when measuring test devices.
- 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 [www.hygiena.com/contact](http://www.hygiena.com/contact). For technical support, visit [www.hygiena.com/support](http://www.hygiena.com/support).