

## Liquid Sampling Device

### GENERAL DESCRIPTION

The LIGHTNING MVP ICON Liquid Sampling Device is a self-contained device for the analysis of liquid samples (i.e. rinse water) using the LIGHTNING MVP ICON™ or LIGHTNING MVP® systems. The MVP ICON and MVP systems detect food and microbiological residue by measuring Adenosine triphosphate (ATP) using luciferase bioluminescence. ATP is found in most food residues and all bacteria, yeast and mold cells.

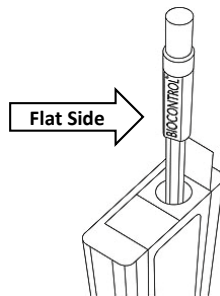
Part No. 64004-100 (100 tests)

### KIT COMPONENTS

One box of 100 liquid sampling devices

### IMPORTANT USAGE GUIDELINES

It is critical to insert the sampling device into the MVP ICON with the two flat sides of the sampling device's base chamber facing left and right. Improper sampling device orientation may result in damage to the instrument.



Do not insert wet or contaminated sampling devices into the instrument. Wipe condensate from exterior of device before use with a clean, lint-free cloth. Avoid handling the device with wet or contaminated hands.

Always remove sampling devices from instrument after reading.

Do not store the MVP ICON or MVP instrument on its side or back. Avoid storing in humid areas where water leaks are possible.

### TEST PROCEDURE

#### A. Collecting Sample

- Twist to remove liquid sampling device from body tube. The swab tip will be dry. Be careful not to touch the tip or inside the liquid test device with fingers.
- Insert the swab tip into the liquid sample until tip is fully submerged. Hold the tip in the sample for 5 seconds. The MVP ICON Liquid Sampling Device will capture 100  $\mu$ L of sample in the swab tip. Reinsert the liquid sampling device into the body tube using a twisting motion to ensure it is sealed.

**Note:** After swabbing the liquid sample, device is stable for one hour prior to activation and reading results.

#### B. Activating Device

- To activate the liquid sampling device, hold upright and push the plunger down until it is fully depressed. The reagents will be dispensed through the liquid sampling

device washing the sample off the swab tip and into the collection tube.

- Insert the liquid sampling device into the MVP ICON or MVP and read the results. **When inserting in the MVP ICON, ensure the flat sides of the sampling device base chamber face left and right in the instrument.**

**Note:** Results should be read within two minutes of activation. Please refer to the MVP ICON User Guide or MVP System Guide for operating instructions.

### INTERPRETING RESULTS

Always run background controls prior to testing liquid samples (see **Background Control**) as the default pass/fail thresholds may not apply. Samples that give a reading 0.5 Zones over the background control indicate a positive result.

- If the background control tests below 2.1 Zones, BioControl recommends using a minimum cutoff of 2.6 Zones for a positive result.
- Negative results may read the same as background results.

### CONTROLS

Controls should be run prior to testing certain liquid samples (e.g. rinse water) to establish baselines.

**A. Background Control:** The Zone reading found with source water indicates the baseline reading. Running background controls every day prior to testing is recommended.

**B. Positive Control:** A vial of LIGHTNING MVP ICON ATP Positive Control (Part No. 64001-25) is reconstituted with 80  $\mu$ L of tap water.

- To do so, remove and discard the positive control vial cap and add 80  $\mu$ L of tap water. Let stand for one minute.
- Swirl gently at least five times to mix.
- Insert MVP ICON Liquid Sampling Device swab tip and follow positive control instructions for use. The expected reading should be between 3.1 – 4.3 Zones.

### PRECAUTIONS

If sanitizers are used as a final rinse solution, test 100  $\mu$ L of the sanitizer at working concentration from CIP system prior to flushing processing lines. Results should be within 0.2 Zones of the background control.

The appearance of a yellow band on the tip is normal and will not affect performance.

If accidental activation prior to sample collection occurs, do not use the sampling device.

Hold sampling device upright when activating.

Always insert the sampling device into the MVP ICON with the base chamber's two flat sides facing left-to-right.

Read sampling device within two minutes of activation.

Exterior surfaces of sampling device must be dry before inserting into the MVP ICON or MVP system.

When reading the sampling device, the MVP ICON or MVP must be kept upright (no greater than a 45° angle). See MVP ICON User Guide or MVP System Guide for additional information.

## STORAGE

Sampling devices should be stored at a temperature between 2 °C – 30 °C (36 °F – 86 °F). Protect from direct sunlight. Unused devices must be resealed in the foil bags.

## WARRANTY

BioControl Systems, Inc. (BCS) warrants this product to be free from defects in materials and workmanship, when stored under labeled conditions and used as intended until the expiration of the date stated on the package. BCS agrees during the applicable warranty period to replace all defective products after return to BCS. BCS shall not have obligation under this Limited Warranty to make replacements which result, in whole or in part, from negligence of the Buyer, or from improper use of the products, or use of the product in a manner for which it was not indicated. Buyer shall notify BCS of any products which it believes to be defective during the warranty period. At BCS option, such products shall be returned to BCS, transportation and insurance prepaid. BCS shall replace any such product found to be defective, at no charge. Should BCS examination not disclose any defect covered by the foregoing warranty, BCS shall so advise Buyers and dispose of the product in accordance with Buyer's instructions.

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IF YOU REQUIRE MORE INFORMATION ABOUT THE LIGHTNING MVP ICON LIQUID SAMPLING DEVICE, ITS USE OR OTHER BIOCONTROL PRODUCTS, PLEASE CONTACT:

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