**DAILY HYGIENE MONITORING FOR HYGIENE MANAGEMENT**

With the App, anyone can check cleanliness easily

1. Measure | Detection Perfection in 10 Seconds
   - **Swab**: Swab the sample and insert the swab into main body
   - **Measure**: Shake well and insert into the Lumitester
   - **Analyze**: Measurements (RLU) displayed within 10 seconds

**Measure**

2. Understand | App to continuously monitor multiple data

Recorded data can be displayed in time-series by registering with our specialized App. Inspection pass rates are automatically graphed and improvements can be visualized. Employees will be more conscious of hygiene, and will maintain a high standard of environmental sanitation, which will help build greater trust in your business.

**Understand**

3. Connect | Centralized multi-site data with cloud data management

Data will be stored in the cloud and can be accessed from anywhere in the world. This will allow fast detection and response to any problems that may arise.

**Connect**

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**Rapid Hygiene Monitoring System**

**Lumitester Smart**

- **Product code**: 61234
- **Measurement time**: 10 seconds
- **Data output**: RLU (Relative Light Unit)
- **Power**: Two AA alkaline or nickel hydride rechargeable batteries
- **Accessories**: Two AA alkaline batteries, cleaning brush, USB cable, strap, Quick Manual

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**ATP + ADP + AMP Test**

**LuciPac A3 Surface**

- **Product code**: 60361 100 swabs/kit
- **Storage Condition**: 2-8°C (Do not freeze)
- **Expiry**: 15 months after manufacturing date

**LuciPac A3 Water**

- **Product code**: 60365 100 swabs/kit
- **Storage Condition**: 25°C: 14 days (Unopened)
  30°C: 5 days (Unopened)
- **Expiry**: 15 months after manufacturing date

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**LuciPac A3**

- **Product code**: 60361 100 swabs/kit
- **Product code**: 60365 100 swabs/kit

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Lumitester™

With A3 Detection

ATP + ADP + AMP

More Reliable and Sensitive

A3 Finds What Others Miss

Lumitester™

Smart Product code: 61234

Measurement time: 10 seconds

Data output: RLU (Relative Light Unit)

Power: Two AA alkaline or nickel hydride rechargeable batteries

Accessories: Two AA alkaline batteries, cleaning brush, USB cable, strap, Quick Manual

Do not use this product for purposes other than hygiene monitoring.

It is not to be used for counting general living bacteria or detecting specific pathogens.

**LuciPac A3**

Rapidly verify sanitation processes on-site

Can be used as on-site improvement tool

**Simple & Easy**

Easy to operate

Usable for anybody

**Numerical**

Result is displayed as numeric value

Easy to standardize

**Accurate**

Detects not only ATP, but also ADP and AMP

Finds what other methods miss

Learn about A3 Technology

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**What is A Novel ATP Test? - ATP+ADP+AMP Hygiene Monitoring System**

Kikkoman has developed a novel ATP test, A3 technology by utilizing brewing technique of soy sauce. Kikkoman’s own A3 technology allows you to detect not only ATP but also ADP and AMP have been overlooked.

**What is ATP, ADP, AMP?**

ATP (adenosine triphosphate) is a molecule found in all living cells and serves as an indicator of overall surface hygiene and cleaning efficacy. ADP (adenosine diphosphate) and AMP (adenosine monophosphate) are derived from ATP during the processing, such as heat treatment and fermentation.

**Kikkoman A3 Technology**

Kikkoman has forever improved the ATP test using Kikkoman’s A3 Technology that employs advanced chemistry to detect ATP+ADP+AMP to offer higher sensitivity and better detection.

**Object to be measured**

ATP, ADP, AMP are present in bacteria, food residues

**A3 Technology - Detects ATP+ADP+AMP / More Reliable and Sensitive**

LuciPac A3 detecting ATP+ADP+AMP showed superior sensitivity and stability for detection of food residues and allergens compared to conventional ATP assays.

**A3 vs. ATP in Food**

Food residues which contain high level of ADP, AMP such as meat, fish, processed food are detectable with high sensitivity.

**A3 Technology - Indicator of Hygiene Monitoring / Prevents Contamination**

Sanitation is critical to food safety. A3 technology prevent ineffective cleaning by monitoring environmental contamination. Many of the food processors use A3 technology as part of the sanitation program to verify the effectiveness of its processes.

**Correlation between bacterial counts and ATP+ADP+AMP level**

**Evaluation of cleaning (stainless surface)**

Kikkoman A3 Technology (ATP+ADP+AMP) represents a novel ATP test that can detect residues left behind by ineffective cleaning at lower levels.

**Implementation Guide — Case example of initial stage**

**ATP+ADP+AMP Hygiene Monitoring System (A3 assay) for Preventive Controls**

Easy to use and provides immediate feedback and verification of sanitation processes. Enables monitoring environmental contamination, including food residues and bacteria, and for detection of biofilms that can harbor pathogens and allergens.

**Food & Beverage Processors**

Evaluate the cleanliness of production line

**Determination of test locations**

The areas likely to remain contaminated such as valves of tank, filter or pipe-coupling packings.

**Benchmark values and swabbing methods**

- Small sample: 200 RLU or lower
- Large sample: 500 RLU or lower

**Food Service**

Prevent secondary contamination by hygiene monitoring

**Determination of test locations**

The areas difficult to wash and likely remain contaminated

**Benchmark values and swabbing methods**

- Small sample: 500 RLU or lower
- Large sample: 1,000 RLU or lower

**Hygiene Education and Feedback**

Hand washing is primary measure of infection prevention and control

**When you do measure?**

- Please use this kit after hand washing and before using disinfectants.

**Benchmark values and swabbing methods**

- Small sample: 200 RLU or lower

**Note**

- Please note that benchmark RLU value depends on the condition of the surface, and type of ingredients/materials contacted on the surface, also risk management level of the area. We recommend our customer to conduct self-validation and establish own benchmark value.

**ATP Test with a Pen, Easy**

Swab the entire palm of the hand over 5–10 passes in the left-to-right and up-to-down directions as well as between fingers and the tips of fingers.